EXOR
Maintenance Manager User Guide

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EXOR Maintenance Manager User Guide

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1 Introduction

Maintenance Manager by EXOR is an application module that is used in conjunction with network manager by exor to manage the maintenance functions for a transportation network and its associated attributes.

maintenance manager provides complete control over the management and operation of routine, cyclic and structural maintenance and allows the user to maintain financial control of maintenance contracts and budgets. It aids in the implementation of policy standards and provides facilities for monitoring performance against these standards. This ensures effective work management. In addition, maintenance manager allows for the implementation of inspection regimes and so provides a legal framework for defending liability claims.

Tools are available within maintenance manager to record and manage, in a user-defined manner, information concerning:

- inspections; planned, reactive, ad-hoc and quality. Planning of surveys, performance reporting, and integration with mobile Data Collection Devices (DCD) are key features.
- defects; with definable priority codes and status and an inventory change indicator Full on-line reporting allows managers to readily assess maintenance needs.
- treatments; treatment models translate defect treatments into sets of pre-defined Bill Of Quantity (BOQ) items that allow engineers to easily translate defects into work packages.
- contracts; holding estimates, actuals and retentions for any pre-defined work type. Managers can therefore have direct access to up-to-date budget positions at any time.
- works orders; defect, cyclic and scheme works orders. Automatic costing for multiple contracts and multiple budget codes, allowing for variations and interim payments. Work can be grouped based on location, pricing, budget code, defect priority and BOQ item. Using these tools engineers can benefit by comparing scenarios to plan cost-effective and timely work solutions.
- resources; such as contractors, schedule of rates, and budgets. Budgets may be set for any area, financial period or type of work and can be continually monitored and trends examined. They may be integrated with Corporate Financial Systems or linked to standard office tools such as desktop spreadsheets for budget profiling. In addition the on-line assessment of contractor and labour availability is a clear benefit. maintenance manager also interfaces into contractor-based systems which manage the labour, plant and materials primitives that make up the higher level BOQ.

maintenance manager includes a wide range of standard reports which enable performance to be monitored against predetermined standards. These measures include how quickly defects of given priorities are repaired and can be used to monitor inspectors, contracts and budgets.

maintenance manager by exor is supplied with a standard set of activities, interval codes, defects and treatments, these can be modified and added to to suit your own operational requirements if required using the modules contained within this chapter.

This User Manual is one of four manuals that are provided with each copy of Maintenance Manager by Exor (MM). Those manuals are:

- Installation Manual: Describes how to install MM on different computing environments;
- Maintenance Manager System Admin Manual: Describes how to configure MM metadata and initially populate MM tables to conform to an organization's business processes
- Maintenance Manager User Manual: Describes how to use MM on a daily basis to manage the preventative, recurring and ad hoc maintenance and repair activity
- Maintenance Manager Inspection Loader Manual: Describes how to download and upload information between MM and other applications or Data Collection Devices (lap tops, pen based, PDAs, etc.)

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This User Manual is intended for those who will use MM to manage the organisations maintenance program. This guide explains how MM can be used to manage Scheduled and Ad-hoc inspections, Cyclic Maintenance Schedules, the creation of Works Orders, their allocation to Contractors, and the administration of those orders through to completion and final payment.

Metadata can be created in MM to enforce compliance with the organizations business rules and procedures. Typically this might include, inspection frequencies, valid defect types, attributes and priorities, valid treatment types, treatment models and priorities, levels of financial authority, user privileges, and the creation and maintenance of Contracts, Contractors, and works items. This metadata will normally be set up by the modules administrator using the Maintenance manager System Admin Manual.

Details of how to download and upload inspections from Data Collection Devices can be found in the Maintenance Manager Inspection Loader Manual.

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2 Managing Inspections

This chapter describes the forms used to create, maintain and review Inspections and associated data

- Inspections – MAI3808
- Inspections by Group – MAI3899
- Defects – MAI3806
- View Defects – MAI3810
- Match Duplicate Defects – MAI2730
- Unmatch Duplicate Defects – MAI2760
- Delete Inspections – MAI2470
- Batch Setting of Repair Dates – MAI2275
- Responses to Notices – MAI3816

The form descriptions provide you with detailed information about each Works Ordering form in highways by exor, including:

- an overall description of the form
- a detailed explanation of each field, including available features (such as List of Values), default values and other characteristics
- helpful information for using the form

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2.1 Defect Status Codes

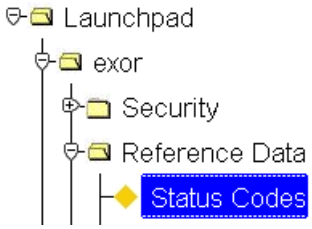

Figure 1 – Status Codes Menu Option

During a defects life cycle it will automatically pass through a number of status code changes from when it is loaded onto the system to when the repair is completed on a works order.

Defect status codes are set up and maintained using Status Codes – HIG9110 as shown below.

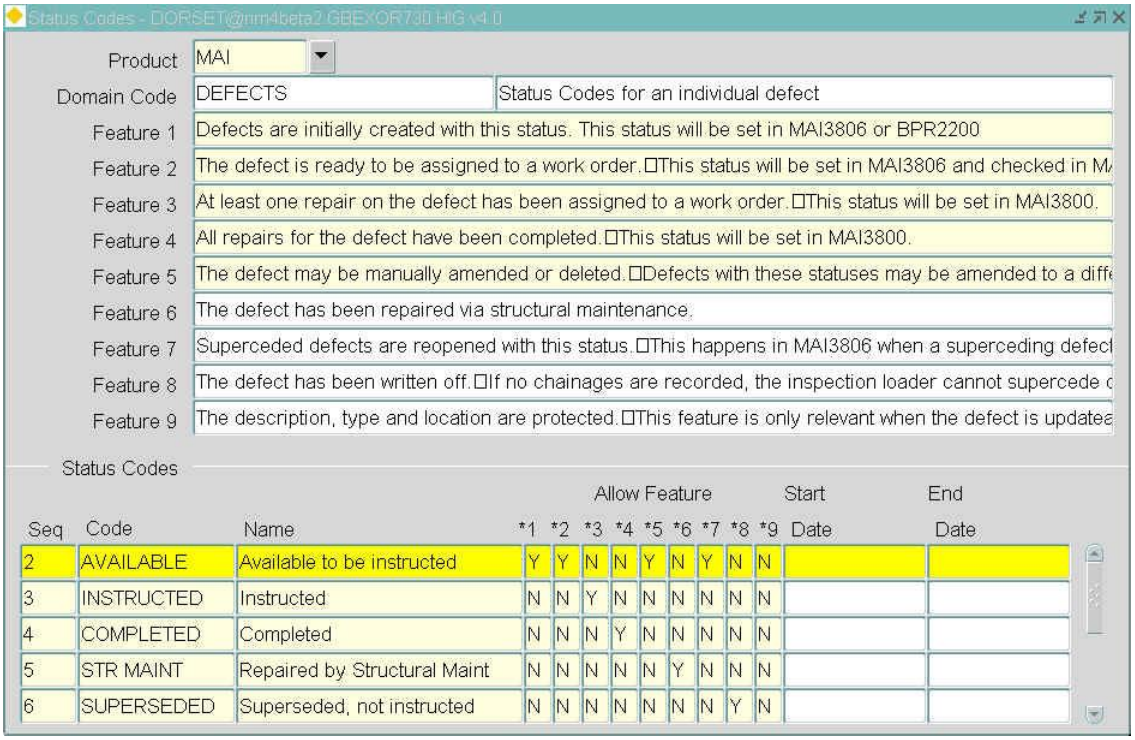
Status Codes - DORSET@nm4beta2.GBEXOR730 HIG v4.0
Product MAI
Domain Code DEFECTS Status Codes for an individual defect
Feature 1 Defects are initially created with this status. This status will be set in MAI3806 or BPR2200
Feature 2 The defect is ready to be assigned to a work order. This status will be set in MAI3806 and checked in MA
Feature 3 At least one repair on the defect has been assigned to a work order. This status will be set in MAI3800.
Feature 4 All repairs for the defect have been completed. This status will be set in MAI3800.
Feature 5 The defect may be manually amended or deleted. Defects with these statuses may be amended to a diff
Feature 6 The defect has been repaired via structural maintenance.
Feature 7 Superceded defects are reopened with this status. This happens in MAI3806 when a superceding defect
Feature 8 The defect has been written off. If no chainages are recorded, the inspection loader cannot supercede
Feature 9 The description, type and location are protected. This feature is only relevant when the defect is updatea
Status Codes
Allow Feature
Seq Code Name *1 *2 *3 *4 *5 *6 *7 *8 *9 Start Date End Date
2 AVAILABLE Available to be instructed Y Y N N Y N Y N N
3 INSTRUCTED Instructed N N Y N N N N N N
4 COMPLETED Completed N N N Y N N N N N
5 STR MAINT Repaired by Structural Maint N N N N N Y N N N
6 SUPERSEDED Superseded, not instructed N N N N N N N Y N

Figure 2 – Defect Status Codes

These status codes are generally maintained by the system administrator. A default set is supplied with the system but they can be added to suit your organisational requirements. When a new status code is added one or more of the following features may be applied.

Feature 1 Defects are initially created with this status. This status will be set in Inspections – MAI3808 or Load Bulk Inspections – MAI2200.

Feature 2 The defect is ready to be assigned to a work order. This status will be set in Inspections – MAI3808 and checked in Works Orders – MAI3800.

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Feature 3 At least one repair on the defect has been assigned to a work order. This status will be set in Works Orders – MAI3800.

Feature 4 All repairs for the defect have been completed. This status will be set in Works Orders – MAI3800.

Feature 5 The defect may be manually amended or deleted. Defects with these statuses may be amended to a different status, providing it is also allowed with feature 5.

Feature 6 The defect has been repaired via structural maintenance.

Feature 7 Superseded defects are reopened with this status. This happens in Inspections – MAI3808 when a superseding defect is deleted.

Feature 8 The defect has been written off. If no chainages are recorded, the inspection loader cannot supersede defects, so they have to be written off. This may be set manually in Inspections – MAI3808 or automatically from Works Orders – MAI3800 (by setting the work status to NOT DONE).

Feature 9 The description, type and location are protected. This feature is only relevant when the defect is updateable (i.e., feature 5 = Y).

If a status code ceases to be required the end date must be set, it must not be deleted for historical reasons.

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2.2 Inspections – MAI3808

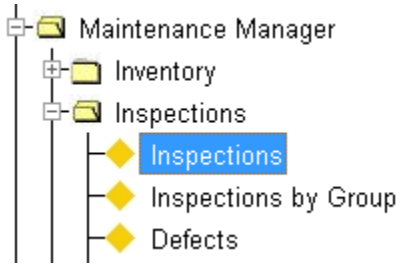

Figure 3 – Inspections Menu Option

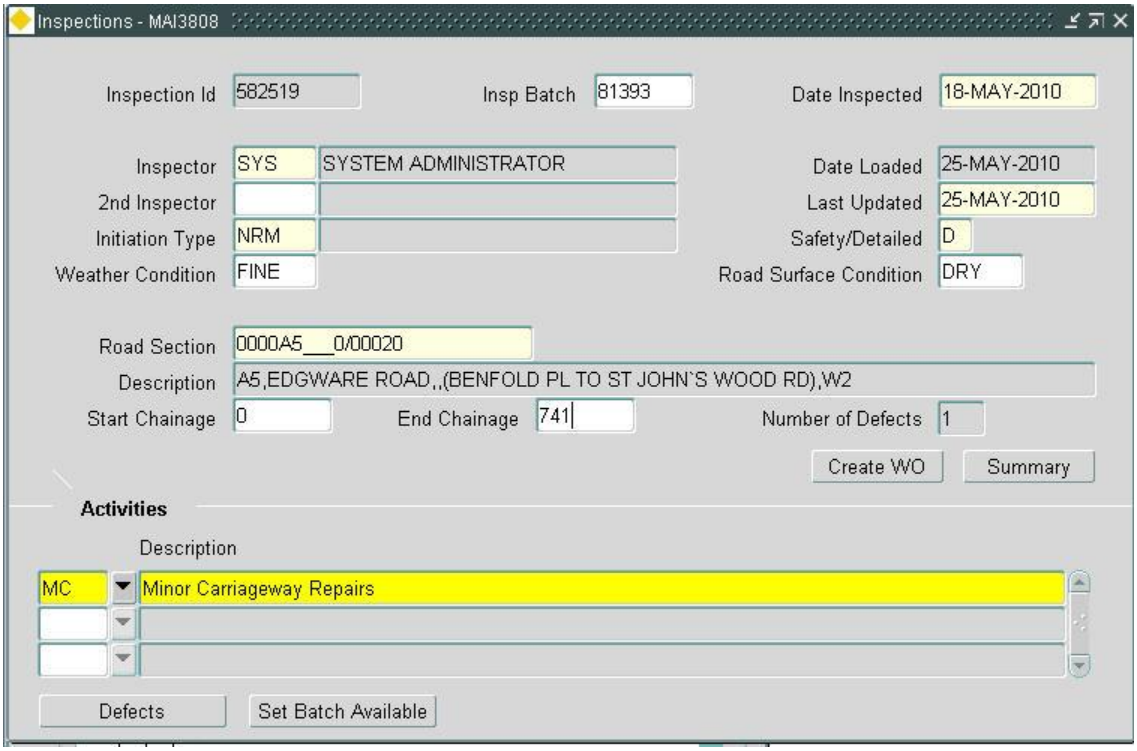

Figure 4 – Inspections

2.2.1 General Information

This form can be used in a number of ways to suit your operational requirements.

If you are inspecting your network using Data Capture Devices (DCD's), Defect details, associated repairs and bill of quantity items are entered on the DCD and downloaded onto the system. This form will allow you to view inspection and defect details for the selected inspection and add additional bill of quantity items if required. Bill of quantities can be automatically generated using Treatment Models – MAI3814. Defects may also be raised against Asset items on a selected Road Section.

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Ad-hoc inspections carried out as a result of a traffic accident or public enquiry are commonly carried out without the aid of a DCD, these inspections can be logged directly onto the system using this form. The road section inspected can be quickly located by using wildcards and some selection criteria in either the Road Section or Description fields. For example, fill in the mandatory fields then enter %12% followed by [List] will call the gazetteer and display all road sections and road groups containing the above selection criteria. Similarly in the description field if you enter %GIANTS% followed by [List] will retrieve all road sections and road groups with GIANTS in the description. This is very useful if you have set your gazetteer up in inspection areas, routes or zones because you do not have to remember which group each section is in.

Manual inspections can be entered using this form but if your inspections contain a large number of road sections it is more advisable to use Inspections by Road Group – MAI3899.

Inspections and associated defects can also be logged onto the system as a result of a public enquiry using Enquiries – DOC0150.

View the inspection history for a road section by querying back by section. The details can then be viewed using [Next Record]. This information is vital when defending an insurance claim and can be printed out using the Insurance Claims Report – MAI2790.

If the system has been set up to use multiple Admin Units for defect priorities the following additional rules apply:

- Allowed repair types defined in the Defect Priorities form (MAI3812), for a defect, are based on the Defect Activity and the Admin Unit of the associated Network.
- Validation of the Defect Priority will ensure that the value is valid for the Defect Activity and the Admin Unit of the associated Network.
- The calculation of the Repair due date will take the Admin Unit of the associated Network into account, when identifying the appropriate Defect Priorities values to be used in the calculation.
- The Admin Unit of the associated Network will be used in the identification of the rules defined in Work Order Automation Rules form (MAI3818) to determine if Work Orders should be automatically created for the details being processed.

2.2.2 Inspections

This window holds basic details of the inspection such as the date it was performed, who carried it out, the weather and road conditions at the time as well as the actual road section that was inspected. The number of defects logged during the inspection will also be displayed in the 'Number of Defects' box.

The [Set Batch Available] button can be used to set the status of all defects for this inspection to 'Available'. The default status for defects loaded onto the system can be set to something other than available until they have been reviewed after the download if required, this is set up using Status Codes – HIG9110, this is usually a system administration function.

Inspection Id ***(Display Only)***

The Inspection ID is a serial reference number generated by the system to uniquely identify each inspection. It cannot be amended.

Insp. Batch ***(Optional)*** ***List***

If the inspection has been loaded from a DCD it will be assigned a batch number, this field cannot be updated. When creating a manual inspection, if the inspection is contained within an existing batch, when querying back the batch select the number from the List of Values. If the manual inspection is not contained within an existing batch, this field can be left blank and the system will generate an appropriate number.

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Date Inspected ***(Required)***

Enter the date the inspection took place. If the inspection has been loaded from a DCD, this field cannot be amended.

Inspector ***(Required)*** ***List***

Select the inspector from the List of Values. These inspectors must be logged on the system and are set up using Users – HIG1832.

Date Loaded ***(Display Only)***

This field will display the date the inspection was first loaded onto the system from a DCD.

2nd Inspector ***(Optional)*** ***List***

If required, select the 2nd inspector from the List of Values.

Last Updated ***(Display Only)***

Displays the date the inspection report was last updated.

Initiation Type ***(Required)*** ***List***

Select the initiation type of this inspection from the list.

These values can be added to using Domains – HIG9120 and updating the INITIATION_TYPE option.

An initiation type of NRM will re-schedule the inspection of the selected type on the section selected.

Safety/Detailed ***(Required)*** ***List***

Enter 'S' for Safety Inspection, 'D' for Detailed Inspection.

Weather Condition ***(Optional)*** ***List***

If known, select the weather at the time of the inspection.

These values can be added to using Domains – HIG9120 and updating the WEATHER_CONDITION option.

Road Surface Condition ***(Optional)*** ***List***

If known, enter the road surface condition at the time of the inspection.

These values can be added to using Domains – HIG9120 and updating the SURFACE_CONDITION option.

Road Section ***(Required)*** ***List***

Use the Gazetteer to select the road section in which this inspection occurred. Wildcards may be used.

The road section inspected can be quickly located by using wildcards and some selection criteria in either the Road Section or Description fields. For example, fill in the mandatory fields then enter %12% followed by [List] will call the gazetteer and display all road sections and road groups containing the above selection criteria.

If a Road Section is Closed subsequent to an Inspection being carried out on the Road, a Check Box will be displayed adjacent to the 'Road Section' field as shown below.

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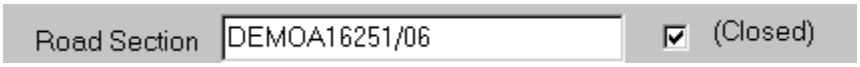

Figure 5 - Road Section

Note that a Road Section cannot be closed if there are outstanding Defects associated with it.

Description ***(Display Only)***

Displays the full road section name.

Wildcards may be used, If you enter %GIANTS% followed by [List] this will retrieve all road sections and road groups with GIANTS in the description. This is very useful if you have set your gazetteer up in inspection areas, routes or zones because you do not have to remember which group each section is in

Start Chainage ***(Required, Default)***

Enter the chainage at which the inspection commenced. This will default to the start of the section.

End Chainage ***(Required, Default)***

Enter the chainage at which the inspection terminated. This will default to the end of the section.

Number of Defects ***(Display Only)***

The number of Defects Logged during this inspection will be displayed.

2.2.3 Inspection Summary

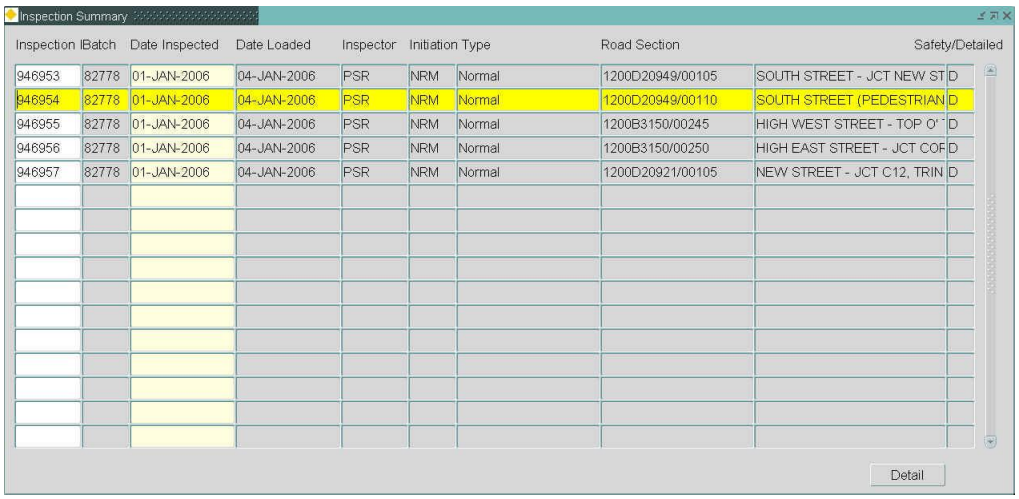
Inspection Summary
Inspection
Batch
Date Inspected
Date Loaded
Inspector
Initiation Type
Road Section
Safety/Detailed
946953 82778 01-JAN-2006 04-JAN-2006 PSR NRM Normal 1200D20949/00105 SOUTH STREET - JCT NEW ST D
946954 82778 01-JAN-2006 04-JAN-2006 PSR NRM Normal 1200D20949/00110 SOUTH STREET (PEDESTRIAN D
946955 82778 01-JAN-2006 04-JAN-2006 PSR NRM Normal 1200B3150/00245 HIGH WEST STREET - TOP O' D
946956 82778 01-JAN-2006 04-JAN-2006 PSR NRM Normal 1200B3150/00250 HIGH EAST STREET - JCT COF D
946957 82778 01-JAN-2006 04-JAN-2006 PSR NRM Normal 1200D20921/00105 NEW STREET - JCT C12, TRIN D
Detail

Figure 6 - Inspection Summary Button

The [Summary] button on the Inspection form will display a summary of all the currently queried Inspections. To view the full detail of an Inspection, click on the required Inspection then press the [Detail] button.

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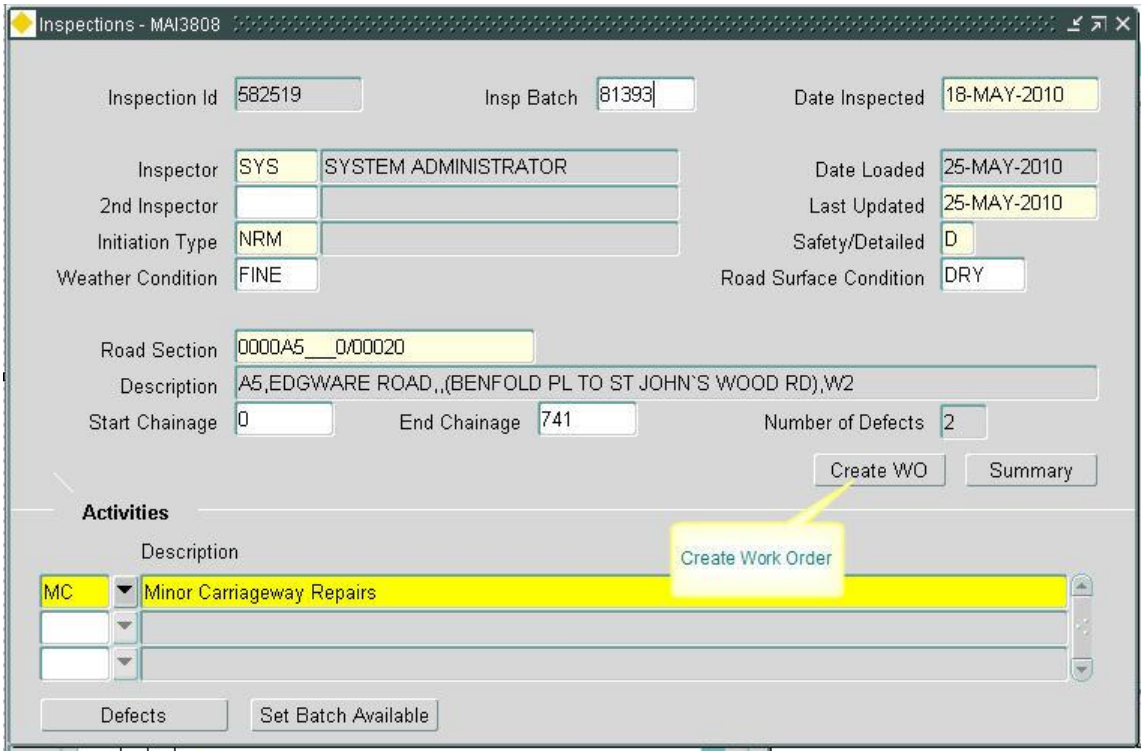

Figure 7 - Create Work Order

While reviewing inspection and defect details within this form a user may create a work order by selecting the [Create WO] button.

2.2.4 Create Work Order

Selecting the [Create WO] button will call form Raise Work Order – MAI3801. This will create a work order with one or more defects for the selected inspection.

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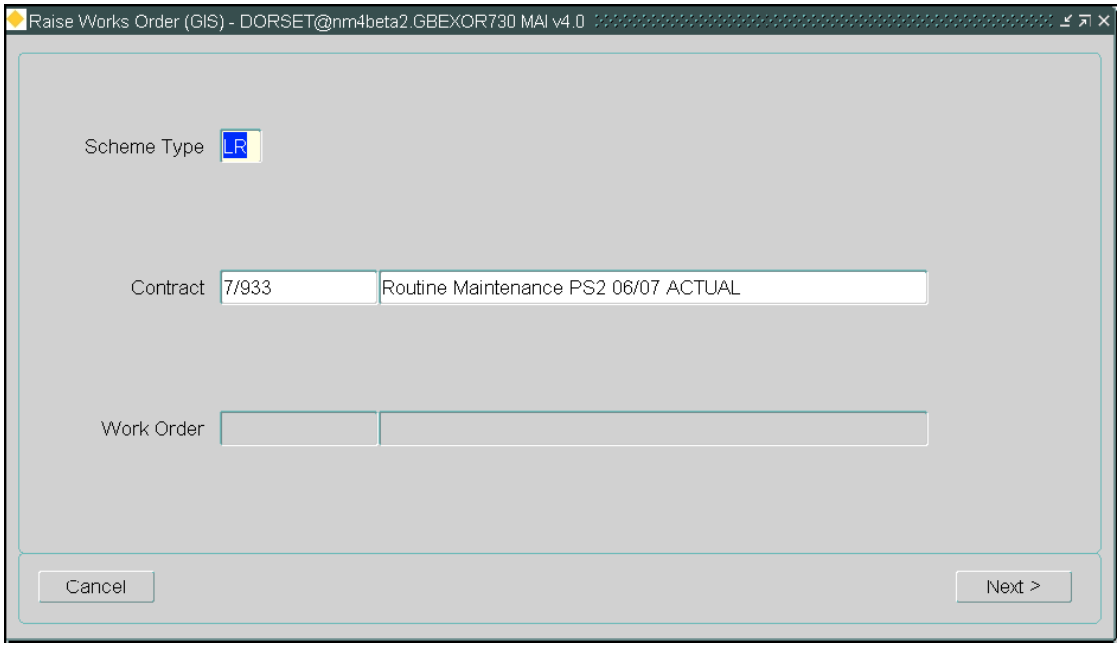

Figure 8 - Raise Work Order

The Raise Works Order form allows the required Scheme Type and Works Order Contract to be selected.

Scheme Type ***(Required,Default)*** ***List***

This is the Scheme Type for the Work Order. The default value is determined by the value set for Product Option DEFSCHTYPL or DEFSCHTYPD (depending on the System Flag set for the Section or Budget Allocation Group on which the Defect is raised). The default value may only be updated if product option DEFSCHTYPU is set to 'Y'.

Contract ***(Required,Default)*** ***List***

This is the Contract used within the Work Order. The default value is determined by the value set for product Option DUMCONCODE. Once the appropriate Contract has been selected press the [Next] Button.

Work Order ***(Default)***

If Product Option WORREFGEN Is set to M – manual, the Work Order Number and Description should be entered. If set to C- Contract based or A – Admin Unit based the work order number will be automatically generated when the [Next >] button is pressed and a valid Budget is selected.

If Multiple Budgets exist for the defect Activity/Scheme Type/Section or Budget Allocation Group combinations, a list will be displayed from which to select the required Budget.

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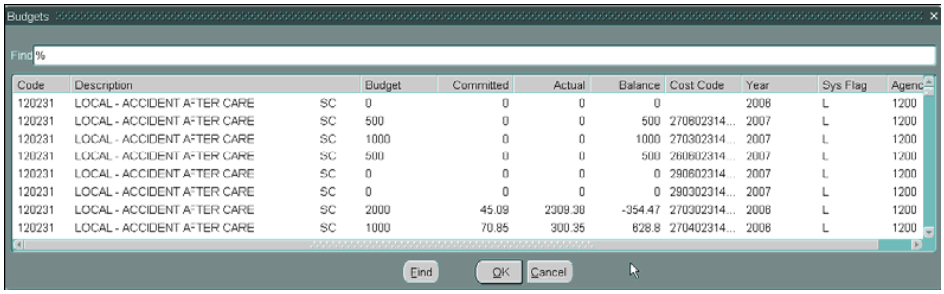
Budgets
Find %
Code Description Budget Committed Actual Balance Cost Code Year Sys Flag Agenc
120231 LOCAL - ACCIDENT AFTER CARE SC 0 0 0 0 2008 L 1200
120231 LOCAL - ACCIDENT AFTER CARE SC 500 0 0 500 270802314... 2007 L 1200
120231 LOCAL - ACCIDENT AFTER CARE SC 1000 0 0 1000 270302314... 2007 L 1200
120231 LOCAL - ACCIDENT AFTER CARE SC 500 0 0 500 280802314... 2007 L 1200
120231 LOCAL - ACCIDENT AFTER CARE SC 0 0 0 0 290802314... 2007 L 1200
120231 LOCAL - ACCIDENT AFTER CARE SC 0 0 0 0 290302314... 2007 L 1200
120231 LOCAL - ACCIDENT AFTER CARE SC 2000 45.09 2309.38 -354.47 270302314... 2008 L 1200
120231 LOCAL - ACCIDENT AFTER CARE SC 1000 70.85 300.35 628.8 270402314... 2008 L 1200
Find
OK
Cancel

Figure 9 - Budgets

Once a Budget has been selected the Number of Defects added to the Work Order will be displayed in a pop-up dialogue. Press [Finish] to create the Work Order.

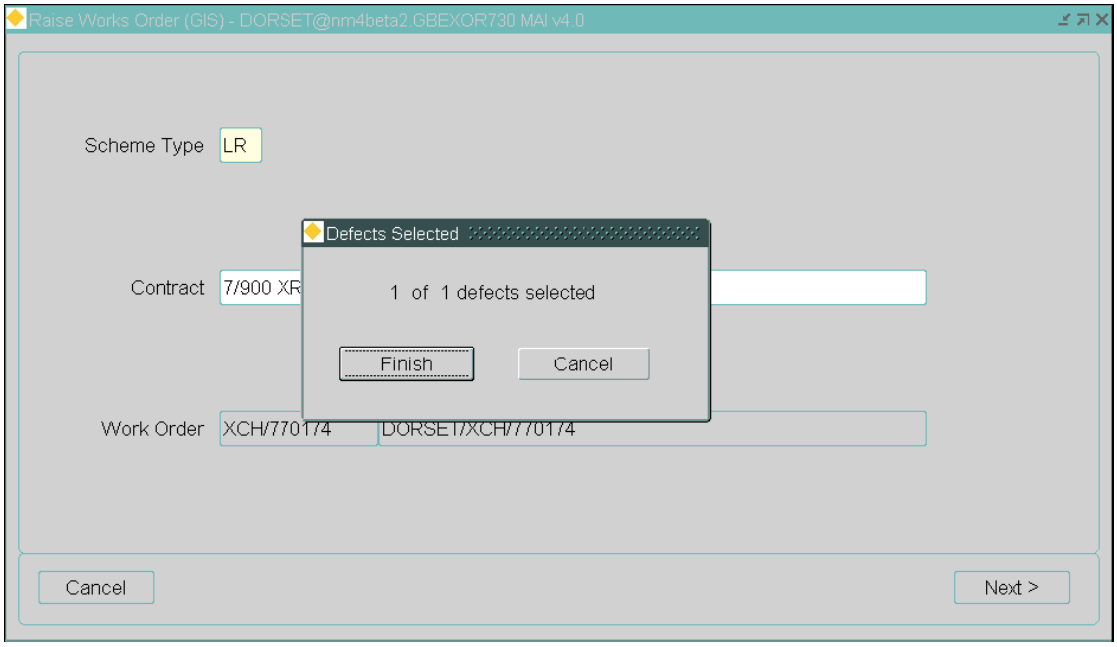

Figure 10 - Raise Work Order

When the [Finish] button is pressed the Work Order (Defects) – MAI3800 module will be called and the Work Order will be displayed allowing the user to make changes as required.

2.2.5 Activities

A list of those activities that were carried out during the inspection will be displayed.

These activities will have been previously set up using Activities – MAI1200. (Maintenance Manager System Administrator Manual)

Code	***(Required)***	***List***

Select a valid inspection activity from the List of Values. A description will be displayed in the adjacent field.

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2.2.6 Defects

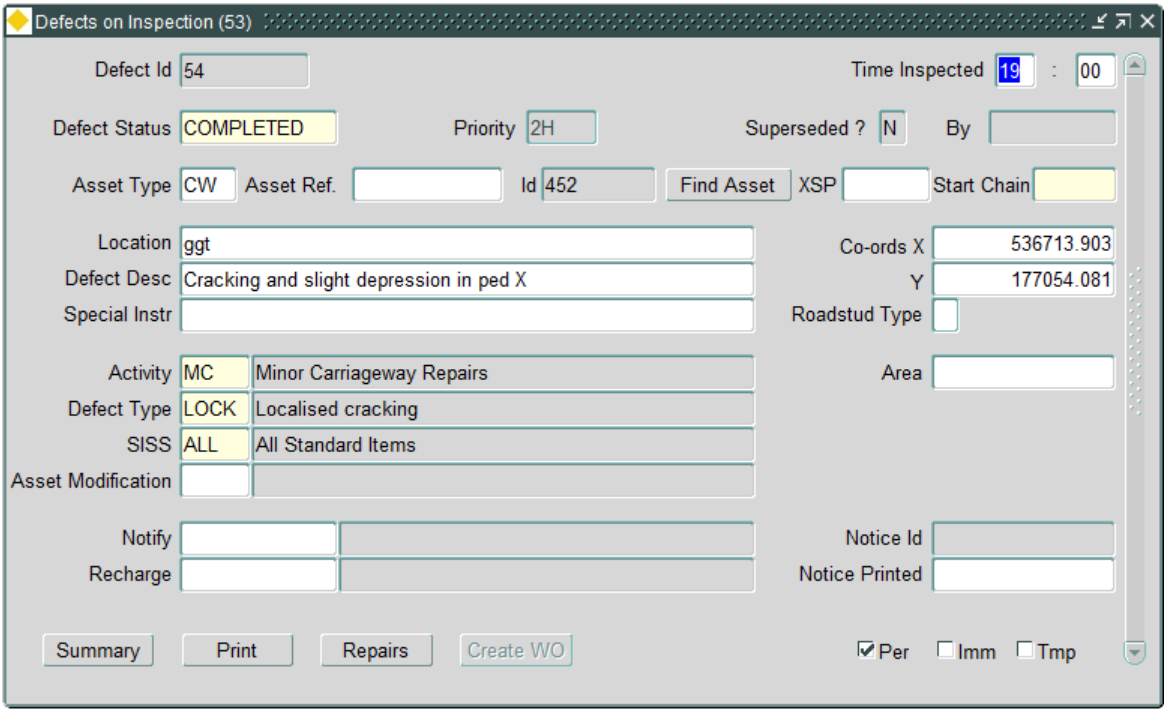

Figure 11 - Defects on Inspection

This window will be displayed when the [Defects] button is selected.

Defect Id ***(Display Only)***

A system-generated number that uniquely identifies this defect will be displayed.

Time Inspected ***(Optional)***

If known, enter the time that the inspection took place.

A time must be entered if the repair time mandatory field in Defect Priorities – MAI3812 (Maintenance Manager System Administrator Manual) is set to 'Y'.

Defect Status ***(Required, Default)***

Upon creation of a defect, the status will generally default to AVAILABLE; this will enable the defect to be included on works orders. Once the status code is set to available it is automatically updated by the system:

- When the defect is placed on a work order the status will be updated to SELECTED.
- Once the work order is instructed the defect status code will be updated automatically to INSTRUCTED.

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Some organisations choose to have the defects default to 'Unavailable', defects that are set to 'Unavailable' can be made available individually, simply by changing the status field this is the only case where the status code is updated manually. Alternatively, all defects for an inspection can be made available in one operation by selecting the [Set Batch Available] button when in the previous window.

If the status of the defect is changed manually a The Status Reason pop-up window will appear where a reason for the status change should be entered.

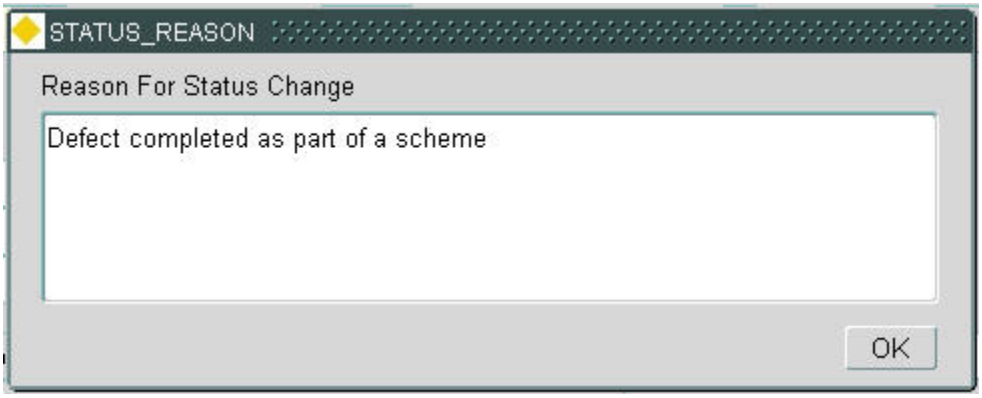

Figure 12 - Status change

The history of changes made to the defect status can be viewed using Audit Details – HIG1505. Rules for the audit should be set up by the system administrator in form Audit Details – HIG1500. (Refer to the Audit Manager manual for further details).

For more information on defect status codes please refer to the Maintenance Manager System Administration Manual section Defect Status Codes – HIG9110.

Priority ***(Required)*** ***List***

Select the priority for repair of this defect.

Select a 'Defect Priority' from the list provided. Only those Defect Priorities associated with the previously selected 'Activity' will be available for selection. The Priority selected will be used to generate a Target Date for the Defect Repair, which is displayed in the bottom right hand corner of the Defect Details window. Defect Priorities and Activities are associated using Defect Priorities – MAI3812 (refer to the Maintenance Manager System Admin Guide).

Superseded? ***(Display Only)***

This field will show 'Y' if the current defect has been superseded by another defect.

Defects will be automatically superseded if they are logged using chainage and XSP values and the chainage falls within the tolerance set in the form Defect Superseding Rules – MAI4406. For more information on superseding rules please refer to the appropriate section in the Maintenance Manager System Administrator Manual.

The superseded defect will no longer be available for inclusion on a works order.

Defects can be manually superseded using Match Duplicate Defects (refer to Match Duplicate Defects – MAI2730) and unmatched using Unmatch Duplicate Defects (refer to Unmatch Duplicate Defects – MAI2760)

By ***(Display Only)***

If this defect has been superseded, this field will display the defect ID of the superseding defect.

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Associating a Defect with an Asset

Defects may be raised against an Asset using the Map Window of the Locator module or directly from the form using the [Find Asset] button. When either of these methods is used the Asset Type, Primary Key value and Asset Id will be displayed. Refer to the Asset Manager User guide for information on raising Defects against Assets from the Map Window or for information relating to Find Assets.

Figure 13

Asset Type *(Optional)* *List*

Select the asset type that is to be linked to the defect, this asset type will have been previously associated with the Inspection Activity using Asset Activities – MAI3632.

Asset Ref *(Required)*

If you know the asset reference it can be entered in to this field directly, if selected from Locator the asset ref will be displayed.

Id *(Display Only)*

The unique system generated asset id will be displayed.

[Find Asset], when selected this button will call Locator and allow the user to select the appropriate asset to link to the defect. When locator is displayed it will automatically have a restriction placed on it so any searches for asset data will be restricted to the network that has been selected in the inspection.

XSP *(Required)* *List*

If your system has been set to record defects by XSP enter the Cross Sectional Position of the defect. This, together with the Chainage and Location fields, enables the defect to be located exactly within the section.

Start Chain *(Required)*

If your system has been set to record defects by chainage, enter the chainage along the section at which the defect was found.

Location *(Optional)*

If known, enter a free text location description to locate the defect within the section.

If you are not locating defects by chainage and XSP an accurate defect location should be entered.

Defect Desc *(Optional)*

If required, enter an additional textual description of the defect.

Special Inst *(Optional)*

If required, enter any additional instructions or comments relating to the defect.

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Co-ords X and Y ***(Optional)***

The Co-ords X and Y fields will display the defect coordinates if the defect has been raised via Locator or within MapCapture. The user may additionally enter or modify the co-ordinates of the defect in these fields if required.

Roadstud Type ***(Optional)`*** ***List***

For Roadstud related defects, enter ‘M’ for a Mandatory defect, ‘A’ for an advisory. This field can only be updated if the inventory type is 'RS'.

Activity ***(Required, Default)*** ***List***

This field will display the inspection activity carried out during the inspection.

These activities are set up using Activities – MAI1200. (Maintenance Manager System Administrator Manual)

Defect Type ***(Required)*** ***List***

Select the type of defect. The list of available defects will be restricted to those associated with the previously selected activity.

This association is set up using Defect Control Data – MAI1300 (Maintenance Manager System Administrator Manual)

(Flexible Attribute Fields) (Number shown in this screen shot)

'Flexible' fields may be displayed on screen dependant on the Defect Activity and Defect Type. These 'flexible' fields will display the values for the attributes as defined in Defect Control Data – MAI1300 (Maintenance Manager System Administrator Manual) for the chosen Defect and Activity Type. The field name will also be determined by the value entered in the 'Text' field for an Attribute in Defect Control Data – MAI1300.

SISS ***(Required)*** ***List***

Select a valid Standard Item Sub-Section Code.

Asset Modification ***(Optional)*** ***List***

A code and associated description will identify any asset modification required. These codes are maintained in Domains – HIG9120 in the ASSET_MODIFICATION domain.

Notify ***(Optional)*** ***List***

If the defect is notifiable, select a valid organisation to be notified of the defect. The responses to any notifications are maintained in Responses to Notices – MAI3816.

Recharge ***(Optional)*** ***List***

If the defect is rechargeable, select a valid organisation to be recharged.

Notice Id ***(Display Only)***

If this defect is notifiable, the system generated reference number of the notice will displayed here after printing the notice using Print Notice Details. The date the notice was printed will be displayed in the adjacent field.

Date Printed ***(Display Only)***

The date the notice was printed will be displayed.

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Per, Imm, Tmp (Checkbox)

These checkboxes can be used in a number of ways

They will indicate if Permanent, Immediate or Temporary repairs exist against a defect, if one or more of the boxes are checked, selecting the checked box will result in details of the repair being displayed in the repairs window.

When adding repairs to a defect, selecting the unchecked box will allow you to enter a repair providing the repair category is valid against the priority of the selected defect. Valid repair categories are set up using Defect Priorities – MAI3812 (Maintenance Manager System Administrator Manual)

If any of the boxes are checked their repairs can be viewed by selecting the [Repairs] button and using the [Next] and [Previous] buttons once in the repairs window.

2.2.7 Summary

This window will be displayed when the [Summary] button is selected.

A summary of all the defects collected for the selected inspection will be displayed. To view the full details of a defect, select the required defect then select the [Detail] button, this will take you back to the previous window.

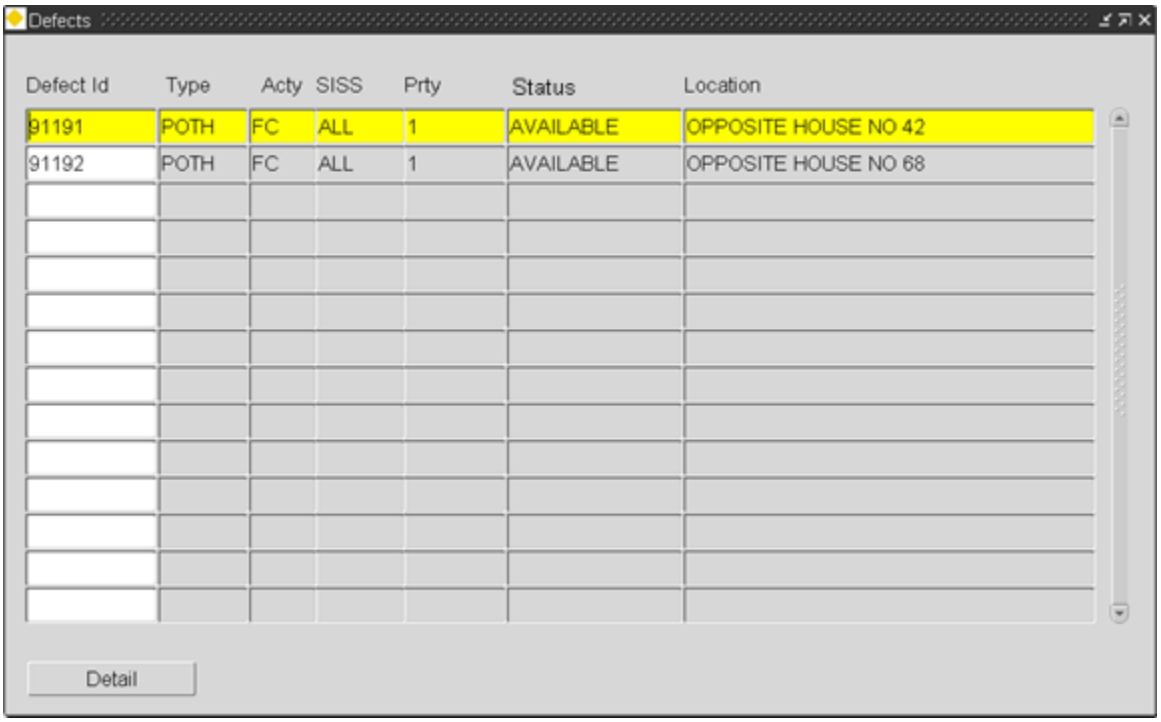

Figure 14 - Defect Summary Button

2.2.8 Print

This button will run the Print Defect Details – MAI3902 report.

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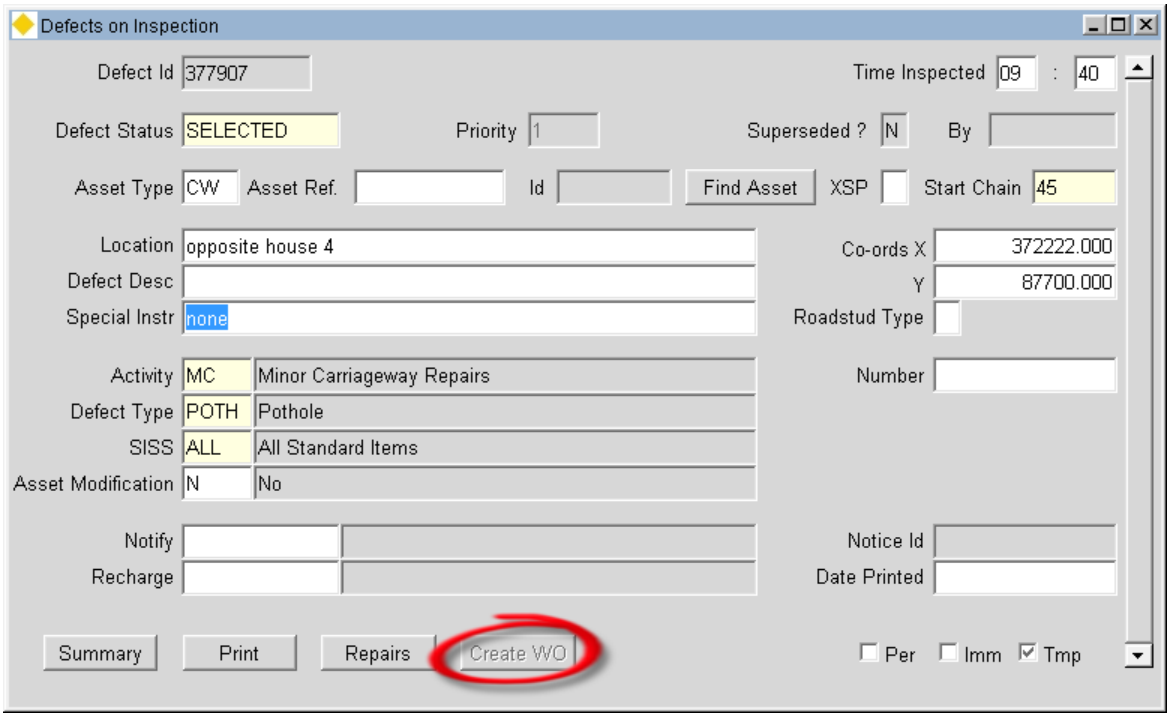

Figure 15 - Create Work Order

2.2.9 Create Work Order

Selecting the [Create WO] button will call form Raise Work Order – MAI3801. This will create a work order for the selected defect record.

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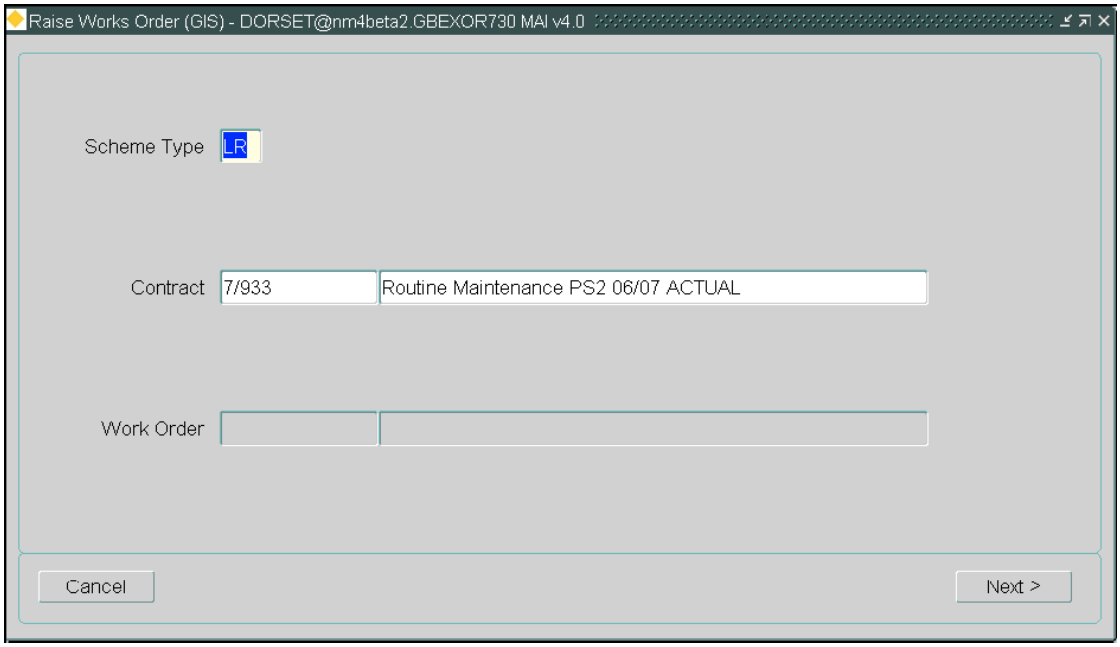

Figure 16 - Raise Work Order

The Raise Works Order form allows the required Scheme Type and Works Order Contract to be selected.

Scheme Type ***(Required,Default)*** ***List***

This is the Scheme Type for the Work Order. The default value is determined by the value set for Product Option DEFSCHTYPL or DEFSCHTYPD (depending on the System Flag set for the Section or Budget Allocation Group on which the Defect is raised). The default value may only be updated if product option DEFSCHTYPU is set to 'Y'.

Contract ***(Required,Default)*** ***List***

This is the Contract used within the Work Order. The default value is determined by the value set for product Option DUMCONCODE. Once the appropriate Contract has been selected press the [Next] Button.

Work Order ***(Default)***

If Product Option WORREFGEN Is set to M – manual, the Work Order Number and Description should be entered. If set to C- Contract based or A – Admin Unit based the work order number will be automatically generated when the [Next >] button is pressed and a valid Budget is selected.

If Multiple Budgets exist for the defect Activity/Scheme Type/Section or Budget Allocation Group combinations, a list will be displayed from which to select the required Budget.

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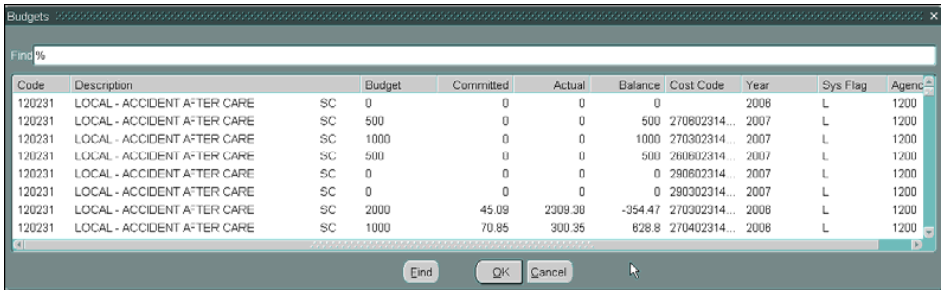
Budgets
Find %
Code Description Budget Committed Actual Balance Cost Code Year Sys Flag Agenc
120231 LOCAL - ACCIDENT AFTER CARE SC 0 0 0 0 2008 L 1200
120231 LOCAL - ACCIDENT AFTER CARE SC 500 0 0 500 270802314... 2007 L 1200
120231 LOCAL - ACCIDENT AFTER CARE SC 1000 0 0 1000 270302314... 2007 L 1200
120231 LOCAL - ACCIDENT AFTER CARE SC 500 0 0 500 260802314... 2007 L 1200
120231 LOCAL - ACCIDENT AFTER CARE SC 0 0 0 0 290602314... 2007 L 1200
120231 LOCAL - ACCIDENT AFTER CARE SC 0 0 0 0 290302314... 2007 L 1200
120231 LOCAL - ACCIDENT AFTER CARE SC 2000 45.09 2309.38 -354.47 270302314... 2008 L 1200
120231 LOCAL - ACCIDENT AFTER CARE SC 1000 70.85 300.35 628.8 270402314... 2008 L 1200
Find
OK
Cancel

Figure 17 - Budgets

Once a Budget has been selected the Number of Defects added to the Work Order will be displayed in a pop-up dialogue. Press [Finish] to create the Work Order.

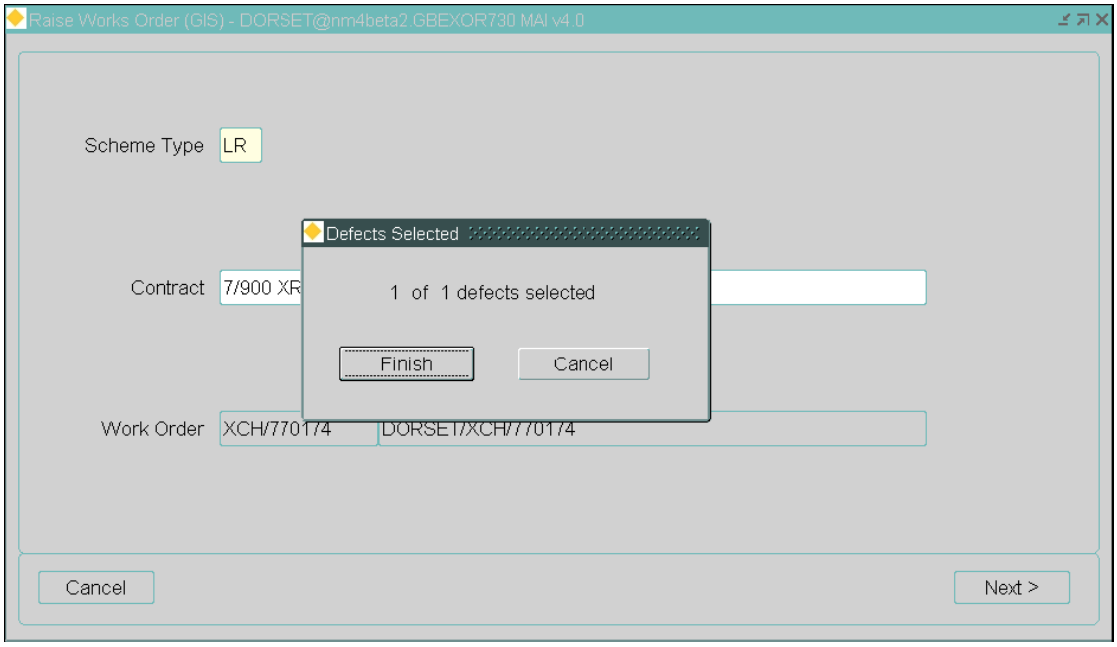

Figure 18 - Raise Work Order

When the [Finish] button is pressed the Work Order (Defects) – MAI3800 module will be called and the Work Order will be displayed allowing the use to make any changes required.

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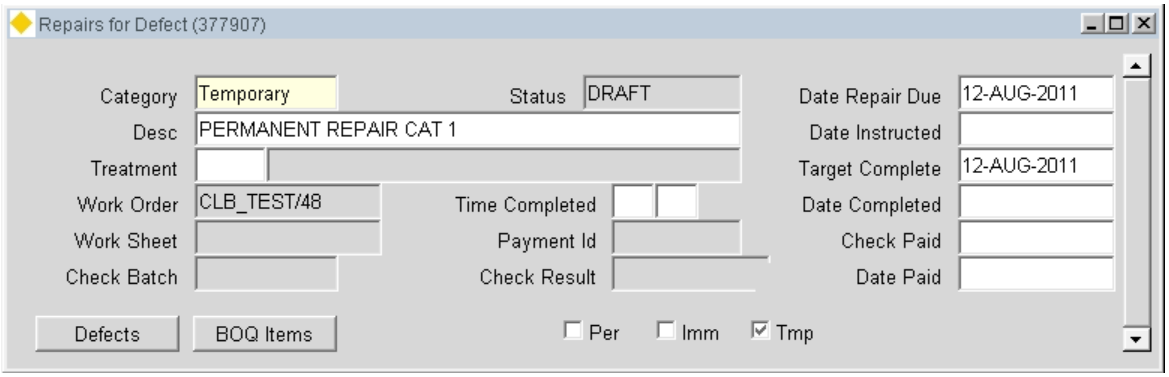

Figure 19 - Repairs Button

2.2.10 Repairs

This window is displayed when the [Repairs] button is selected. To return to the defects window select the [Defects] button.

Category ***(Required, Default)*** ***List***

Select the defect category, Permanent, Temporary or Immediate. A repair category will only be available for the selected activity and defect if it has been previously set up using Defect Priorities – MAI3812 (Maintenance Manager System Administrator Manual)

Status ***(Display Only)***

Displays the current status of the repair. This status is the status of the works order line and is maintained by Works Orders (Defects) – MAI3800 and Payment Run – MAI3840.

Date Repair Due ***(Display Only)***

Displays the date by which the repair should be completed. This is calculated by the system based on the date of inspection and the defect priority.

Desc ***(Optional)***

If required, enter a text description of the repair to be carried out.

Date Instructed ***(Display Only)***

When this defect has been instructed (added to a works order), the date of instruction will appear in this field.

Treatment ***(Optional)*** ***List***

Select the treatment to be used to rectify this defect. A description will be displayed in the adjacent field.

Valid treatment codes will have been previously associated to activities and defects using Treatment Data – MAI1315. (Maintenance Manager System Administrator Manual)

The treatment code can be forced to be mandatory by setting the product option TRECODEMAN to ‘Y’.

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Target Complete ***(Display Only)***

Displays the date by which this repair should be completed. This date is entered when raising a works order.

Work Order ***(Display Only)***

Once a defect has been placed on a works order the works order number will be displayed.

Time Completed ***(Optional)***

When known, enter the time of completion of the repair.

A time must be entered if the repair time mandatory field in Defect Priorities – MAI3812 (Maintenance Manager System Administrator Manual) is set to 'Y'.

Date Completed ***(Optional)***

When the repair has been completed, the date will appear in this field.

If the Product Option REPCOMPDATE is set to 'Y' defects may be manually completed by entering the date here. The status of the defect will change to completed and will not be available for inclusion on a works order.

For additional information see Manually Completing a Defect. For more information on Product Options please refer to the Product Options – HIG9130 section in the Maintenance Manager System Administrator Manual.

Work Sheet ***(Display Only)***

This field will be used to display the reference number of the work sheet containing this repair once it has been printed.

Payment Id ***(Display Only)***

This field will be used to display the reference number of the payment covering this repair once it has been received.

Payment Id's are associated to repairs once the Payment Run – MAI3840 module has been executed.

Date Paid ***(Display Only)***

This field will display the date that the payment run was executed.

Check Batch ***(Display Only)***

If this repair is selected for a random quality inspection, this field will be used to display the system generated batch number for that quality inspection

Check Result ***(Display Only)***

If this repair was selected for a random quality inspection, the results of that inspection will appear in this field.

Check Date ***(Display Only)***

When required, the date of the quality inspection will appear in this field.

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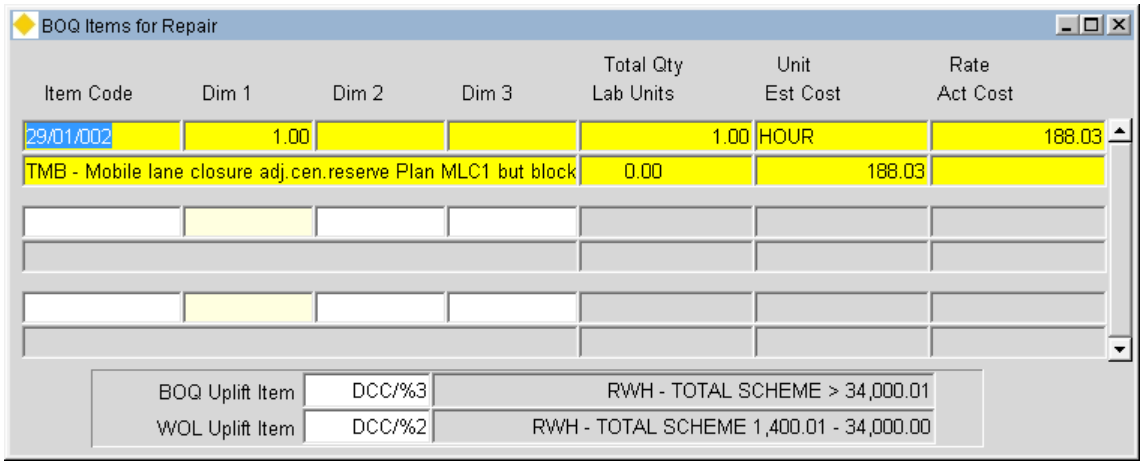

Figure 20 - BOQ Items Button

2.2.11 BOQ Items

This window contains the details of the individual work items required to rectify the current repair. The BOQ items may be populated automatically using Treatment Models – MAI3814. (Maintenance Manager System Administrator Manual).

Item Code ***(Required)*** ***List***

Select the item code representing the standard job item to be used to rectify the current defect. The description for the item will be displayed in the field below.

Dim 1-3 ***(Required)***

Some or all of the three dimension fields should be completed for each job item. The fields to be completed will vary depending on the dimensions required for each job item. A typical example would be a patch repair which would require two dimensions to be completed, for length and width. A pothole, on the other hand, would require three dimensions, length, width and depth. The message line will display a line of text explaining the unit of measurement to be used in each case.

Total Qty ***(Display Only)***

Displays the total quantity of work to be done, based on the values entered in the three Dimension fields above. If the total quantity is outside the allowable range specified for the standard item as set up using Standard Items – MAI3888 (Maintenance System Administration Manual) an error message will result, press [Expand] to view the allowable quantity range.

Unit ***(Display Only)***

Displays the unit of measurement used for costing this standard job item.

Rate ***(Display Only)***

Displays the standard cost per unit of this job item.

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Note: When a 'Rogue Item' is being added to a Bill Of Quantities, the Rate field becomes Mandatory. You should insert the rate per unit for this rogue item. Also, the Item Description field can be amended from the standard Rogue Item description to a more meaningful item description for this particular job.

Lab Units ***(Display Only)***

Displays the calculated amount of labour units for this job. This figure is calculated as the quantity multiplied by the labour multiplier held against the standard job item. This multiplier can be viewed and amended via Standard Items – MAI3888 (Maintenance System Administration Manual)

Est Cost ***(Display Only)***

Displays the estimated cost for the job based on the quantity and the rate per unit. This value will change when the defect is placed on a works order that is subject to contract rates as opposed to the standard rates entered using Standard Items – MAI3888 (Maintenance System Administration Manual).

Act Cost ***(Display Only)***

Displays the actual cost for the job. This will be blank until the defect is placed on a works order, the work is completed ant the contractor has entered the actual dimensions of the work.

BOQ Uplift Item ***(Optional)*** ***List***

Enter the BOQ uplift item, this item will uplift all the BOQ items that have the 'Allow Percent Items ?' field set to 'Y' in Standard Items – MAI3888.

The List of Values will only contain those items that have the 'BOQ Percent Uplift ?' set to 'Y' in Standard Items – MAI3888

WOL Uplift Item ***(Optional)*** ***List***

Enter the Work Order Line uplift item, this item will uplift the entire work order line.

The List of Values will only contain those items that have the 'WOL Percent Uplift ?' set to 'Y' in Standard Items – MAI3888

Note: When a Repair, having either BOQ or WOL Percent Uplift Item Codes assigned, is added to a Work Order, a check is made against the Contract for that work order to determine if the Standard Item Code has been assigned as a Contract Item, and that the contract will allow for Percentage Uplifts. If not, the user will be prevented from saving, or Instructing, the Work Order.

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2.2.12 Manually Completing a Defect.

If a defect has been completed because of some other work that has been carried out on the highway, it can be manually completed on the system as follows:

Using either Defects – MAI3806 or View Defects by Section- MAI3810, locate the defect and select the [Edit Defect] button. This will take you to Inspections- MAI3808 where the defect details can then be modified.

1. In the Repairs for Defects window enter the Date Completed.
2. Select [Save].
3. The Status Reason pop-up will appear where a reason for the status change should be entered.

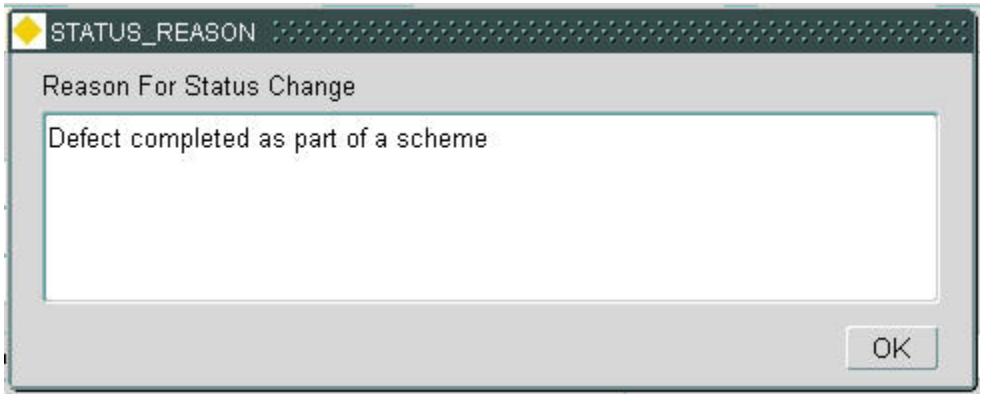

Figure 21 - Status change

4. Select [Save]. The defect status will automatically be updated to Completed.

The history of changes made to the defect status can be viewed using Audit Details – HIG1505. Rules for the audit should be set up by the system administrator in form Audit Details – HIG1500. (Refer to the Audit Manager manual for further details).

Note: The above procedure can only be carried out if the Product Option REPCOMPDATE is set to 'Y' .

Do not change the status of the defect to completed manually.

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2.3 Using Locator with Inspections and Defects

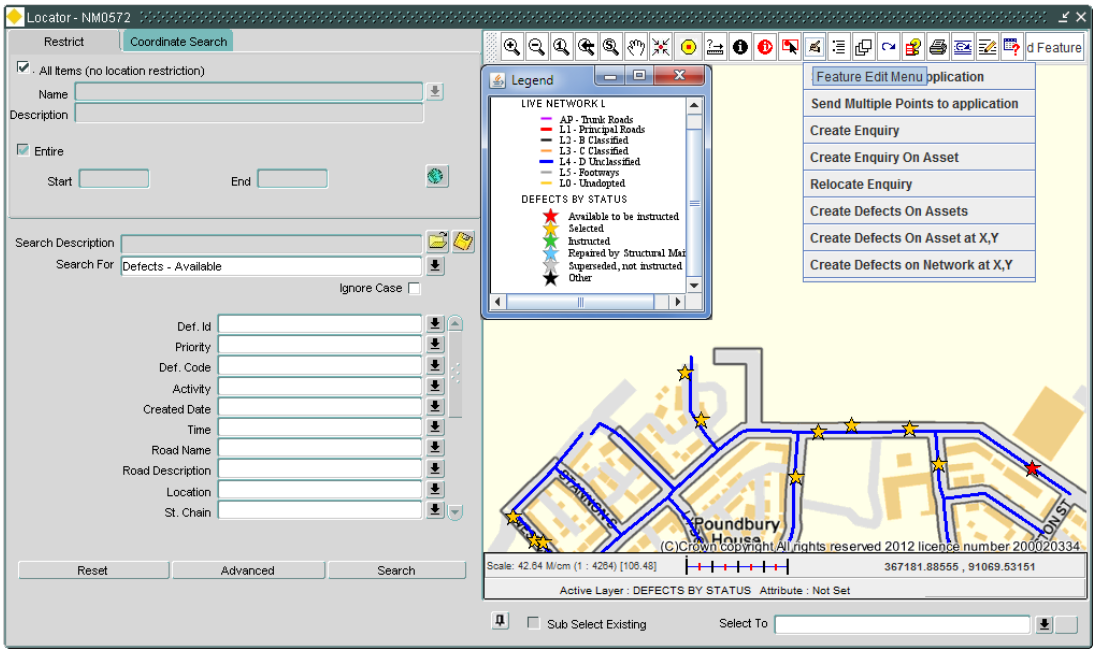

Figure 22 - Locator

2.3.1 General Information

Full information on the use of locator can be found in the Locator and Web Mapping User Guide V4.0

In summary Locator – NM0572 provides Exor Users with an easy to use web based spatial interface that allows new Inspection and Defect information to be quickly created, as well as existing Defect data to be found and viewed on a map.

Three options relating to the creation of Defects and their associated Inspection record are available:

- Create Defect On Assets
- Create Defects On Asset at X,Y
- Create Defects On Network at X,Y

Once a defect has been created the treatment model can be automatically generated with the option to edit it if required.

The user is then presented with the option to immediately raise a works order once the defects have been entered.

Defects can also be searched for using any combination of network location and defect attribute data within the Locator search panel.

Once a defect or defects have been selected within Locator standard Exor modules or custom built PL/SQL procedures can be run as required.

If the system has been set up to use multiple Admin Units for defect priorities the following additional rules apply:

- Valid priorites will be based on the list of Defect Priorities defined in the Defect Priorites form (MAI3812) for the Activity, and where the Admin Unit is within the Admin Unit hierarchy of the associated network
- Allowed repair types, defined in the Defect Priorites form (MAI3812), for a defect, are based on the Activity and the Admin Unit of the associated Network.

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- The calculation of the Repair due date will take the Admin Unit of the associated Network into account, when identifying the appropriate Defect Priorities values to be used in the calculation
- If Automatic Defect Prioritisation is being used (defined by product option DEFAUTOPRI), the Admin Unit of the Network assigned to the Defect, along with the Defect Activity, will be used to identify appropriate details, defined in Maintain Automatic Defect Prioritisation form (MAI3813)

2.4 Create a Defect on Network at X Y using Locator

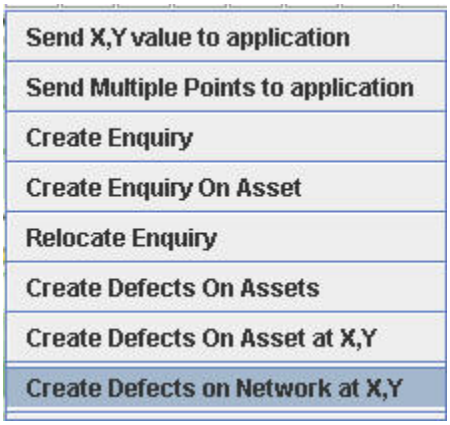
Send X,Y value to application
Send Multiple Points to application
Create Enquiry
Create Enquiry On Asset
Relocate Enquiry
Create Defects On Assets
Create Defects On Asset at X,Y
Create Defects on Network at X,Y

Figure 23 - Feature Edit Menu

This option allows a Defect to be created on a Network Section, by clicking at the appropriate location on the map.

To create a Defect on the network, firstly navigate to the appropriate map extent using the Locator Search facilities, the Map window Navigation tools or a combination of both.

Select the 'Create Defects on Network at X,Y' function from the 'Feature Edit' tool. The mouse cursor will change to a 'cross hair'. To create the Defect, click on the required location within the Map window.

The system will attempt to derive a Network location by snapping to an available Layer. Only the visible Layers (defined within the Layer Control tool) which have been defined as 'Snapping Layers' for the Defect theme (in GIS Themes – GIS0010) will be used by this 'snapping' process. A list of all Network Elements (Datum's or Groups) within a defined snapping tolerance (defined in GIS Themes – GIS0010) from the Visible Active Layers, is displayed to allow the User to select the appropriate Network element to which to Snap and derive its location.

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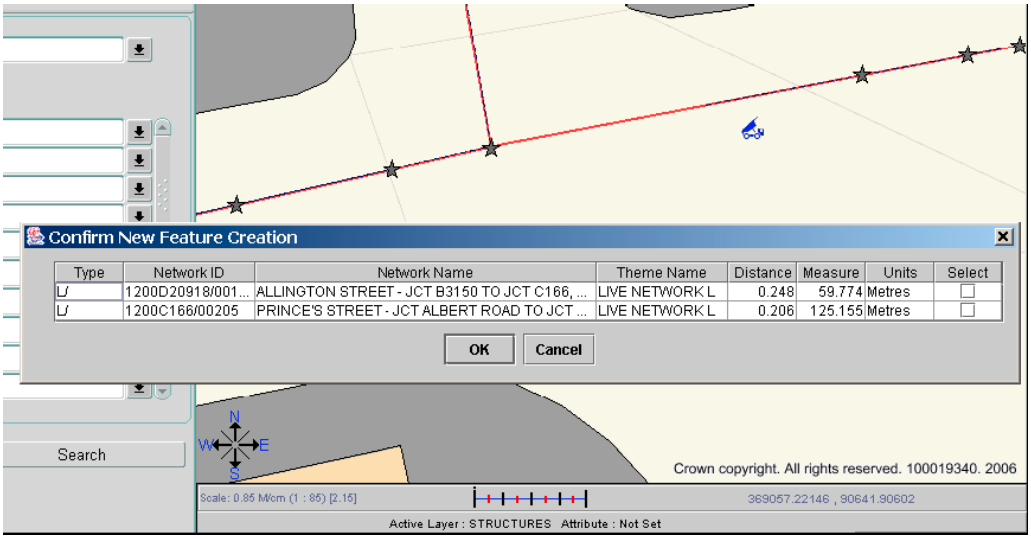

Figure 24 - Select Network

The following details are displayed within the 'Confirm New Feature Creation' window.

- Network/ Group Type of Element
- Element Name
- Element Description
- Theme or Layer name of snapping theme
- Perpendicular distance to the Element from the click position
- Offset measure along the Element at the 'snapping' point
- Units of measurements

Each Section within the List may be 'highlighted' on the Map in turn by checking the 'Select' option. This allows the User to select the correct Section on which to create the Defect.

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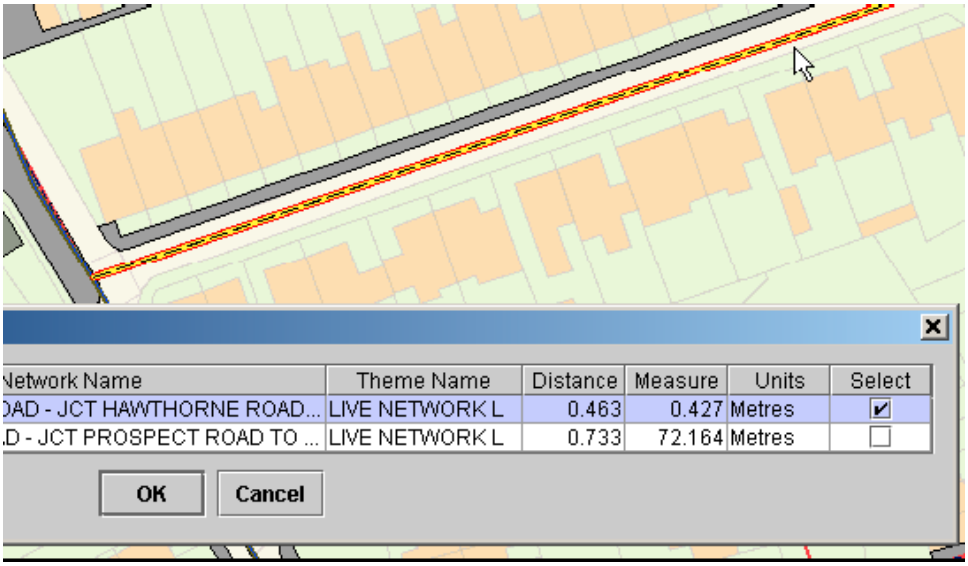

Figure 25 - Highlight Network

- To create the Defect on the selected Network press the [OK] button.
- To cancel the entire Defect Creation process press the [Cancel] button.

If the position at which the User clicks to create the Defect on the Network is outside the tolerance set an error message will be displayed. Acknowledge the message by pressing the [OK] button and re-select the 'Create Defects on network at X,Y ' option if the Defect is still required.

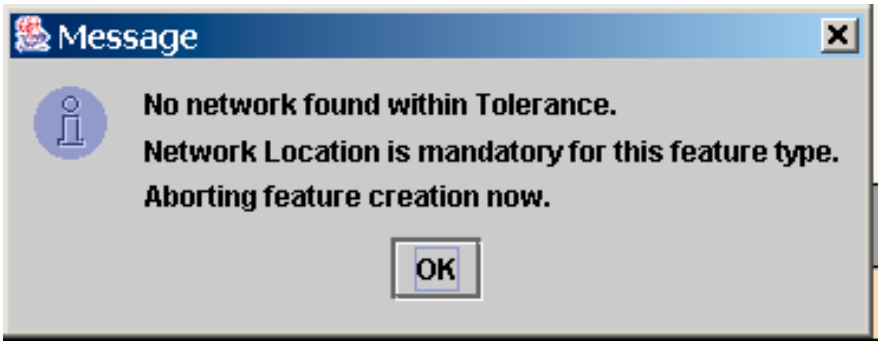

Figure 26 -Message

When the correct position for the Defect on the Network has been selected the 'Confirm Network Selection' window will be displayed. If the incorrect Section has been selected press [Cancel] otherwise press [Next >] to continue with the defect creation process.

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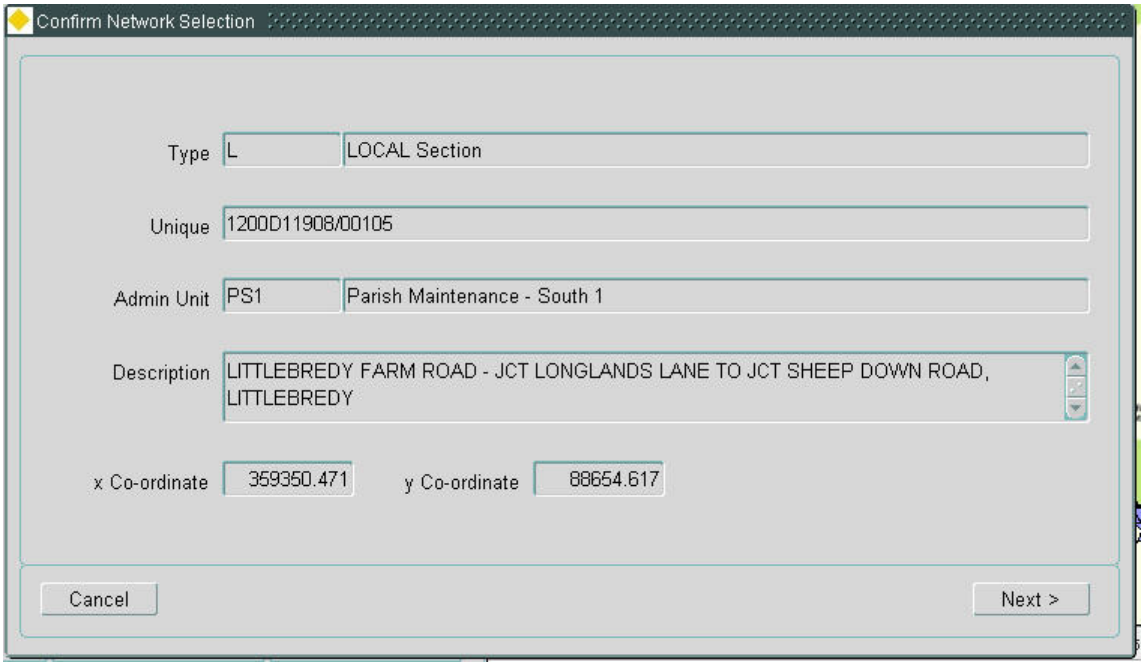

Figure 27 - Confirm Network Selection

The following Details are displayed on the 'Confirm Network Selection' window:

- Network Type and Description
- Section Name and Description
- Section Admin Unit
- X and Y coordinates of the 'defect'

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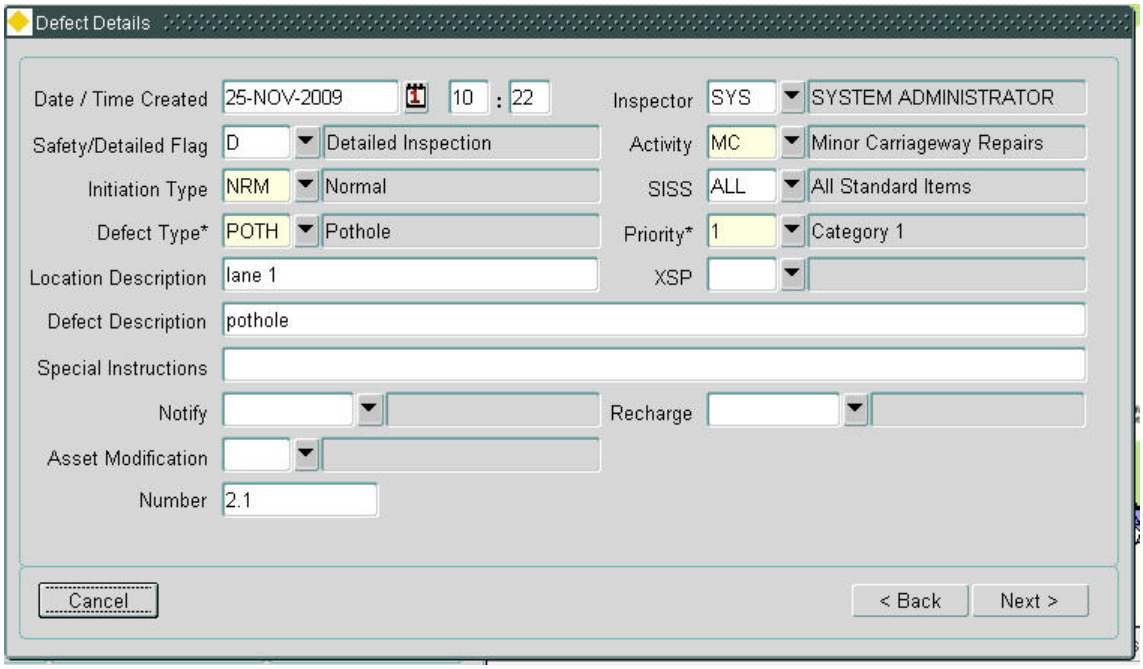

Figure 28 - Defect Details

A window will be displayed allowing the Defect details to be entered. To abandon the Defect creation process press the [Cancel] button.

Date/Time Created ***(Default)***

The current system date and time will be populated. These may be amended if required.

Inspector ***(Required)*** ***List***

Select the inspector from the list of values. These inspectors must be logged on the system and are set up using Users – HIG1832.

Safety/Detailed ***(Required)*** ***List***

Enter 'S' for safety inspection, 'D' for detailed inspection.

Activity ***(Required)*** ***List***

Select the appropriate 'Activity' from the list provided. Only the Activities associated with the selected Asset Type will be available for selection. Activities and Asset Types are associated using Asset Activities – MAI3632 (refer to the Maintenance Manager System Admin Guide).

Initiation Type ***(Required)*** ***List***

This is the Initiation Type used for the related Inspection record created for the Defect. The default value is defined using Product Option INSP_INIT. This must contain a valid value as defined for the INITIATION_TYPE Domain using Domains – HI9120 (refer to the General System Admin Guide).

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SISS Code ***(Required)*** ***List***

If required, enter a SISS code (Standard Item Sub-Section). The default value is defined using Product Option DEF_SISS. Standard Items and Standard Item Sub-Sections are maintained using MAI3886 – Standard Item Sections and Sub-Sections (refer to the Maintenance Manager System Admin Guide).

Defect Type ***(Required)*** ***List***

Select the appropriate 'Defect Type' from the list provided. Only those Defect Types associated with the previously selected 'Activity' will be available for selection. Defects and Activities are associated using Defect Control Data – MAI1300 (refer to the Maintenance Manager System Admin Guide).

Priority ***(Required)*** ***List***

Select a 'Defect Priority' from the list provided. Only those Defect Priorities associated with the previously selected 'Activity' will be available for selection. The Priority selected will be used to generate a Target Date for the Defect Repair, which is displayed in the bottom right hand corner of the Defect Details window. Defect Priorities and Activities are associated using Defect Priorities – MAI3812 (refer to the Maintenance Manager System Admin Guide).

Location Description ***(Optional)***

If required, enter a description for the Location of the Defect. A maximum of 40 characters is allowed.

Defect Description ***(Optional)***

A description of the Defect may be entered if required. A maximum of 240 characters is allowed.

Special Description ***(Optional)***

If required, enter any additional instructions or comments relating to the defect. A maximum of 254 characters is allowed.

XSP ***(Required)*** ***List***

If the system has been set to record defects by XSP enter the cross sectional position of the defect. This together with the 'Chainage' and 'Location' fields enables the defect to be located exactly within the section.

Notify ***(Optional)*** ***List***

If the defect is notifiable, select a valid organisation to be notified of the defect. The responses to any notification are maintained in Responses to Notices – MAI3816.

Recharge ***(Optional)*** ***List***

If the defect is rechargeable, select a valid organisation to be recharged.

Action Modification ***(Optional)*** ***List***

An Asset Modification Flag may be set for the Defect Repair. This allows an indicator to be set to signify that the affected Asset has been 'Replaced', 'Renewed' or 'Repaired' for example. This is useful when carrying out Asset Valuations. The list of Asset Modification Flags is maintained using Domains – HIG1920 and updating Domain name ASSET_MODIFICATION (refer to the General System Admin Guide for information relating to System Domains).

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Flexible Defect Attributes *(Optional)*

If any Attributes (length, height, width, number etc.) have been defined for the selected Defect Type using Defect Control Data – MAI1300, these will be displayed at the bottom of the Defect Details window. There may be up to 4 of these attributes for each defect type.

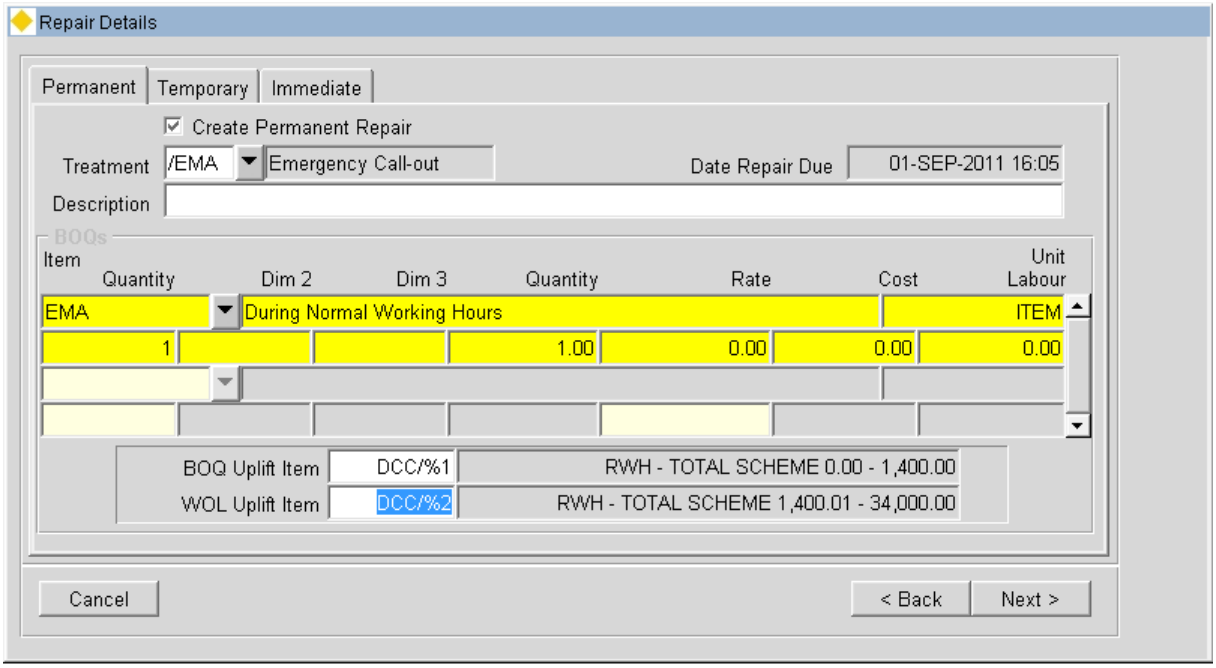

Figure 29 - Repair Details

The Repair Details window allows the user to enter details for one or more repair for the defect. There are three tabs, one for each repair type. A repair type will only be available for the selected activity and defect if it has been previously set up using Defect Priorities – MAI3812 (Maintenance Manager System Administrator Manual)

Create Repair *(Optional/Checkbox)*

Tick the checkbox on each tab to indicate that a repair of that type should be created. If data is entered into any of the fields the checkbox will be ticked automatically. The Permanent Repair will default to ticked.

Treatment *(Optional)* *List*

If required select a Treatment for the Defects. If selected, the BOQ items from the Treatment model will be used as the Repair Items for the Defect. Only those 'Treatments' associated with the previously selected 'Activity'/'Defect Type' combination will be available for selection. 'Treatments' are maintained using Treatment Data – MAI1315 (refer to the Maintenance Manager System Admin Guide).

The treatment code can be forced to be mandatory by setting the product option TRECODEMAN to 'Y'.

Description *(Optional)*

If required a description of the repair description may be entered.

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Date Repair Due ***(Display Only)***

The Target Date and Time for the Defect Repair will be displayed. This is generated using the 'Defect Priority' previously entered.

BOQs ***(Optional)*** ***List***

BOQs for the repair can be entered as required.

If Treatment Models are being used (see Maintenance Manager User/Admin Guides) the default Bill Of Quantity Items within the Treatment Model defined for the selected Activity/Defect Type/Treatment will be shown. These can be amended, added to, removed, etc for the current set of Defects.

These BOQ items apply to ALL Defects created within the current selection; however, these may be amended for individual defects later in the defect creation process.

BOQ Uplift Item ***(Optional)*** ***List***

Enter the BOQ uplift item, this item will uplift all the BOQ items that have the 'Allow Percent Items ?' field set to 'Y' in Standard Items – MAI3888.

The List of Values will only contain those items that have the 'BOQ Percent Uplift ?' set to 'Y' in Standard Items – MAI3888

WOL Uplift Item ***(Optional)*** ***List***

Enter the Work Order Line uplift item, this item will uplift the entire work order line.

The List of Values will only contain those items that have the 'WOL Percent Uplift ?' set to 'Y' in Standard Items – MAI3888

Note: When a Repair, having either BOQ or WOL Percent Uplift Item Codes assigned, is added to a Work Order, a check is made against the Contract for that work order to determine if the Standard Item Code has been assigned as a Contract Item, and that the contract will allow for Percentage Uplifts. If not, the user will be prevented from saving, or Instructing, the Work Order.

To continue creating the Defects, press [Next >].

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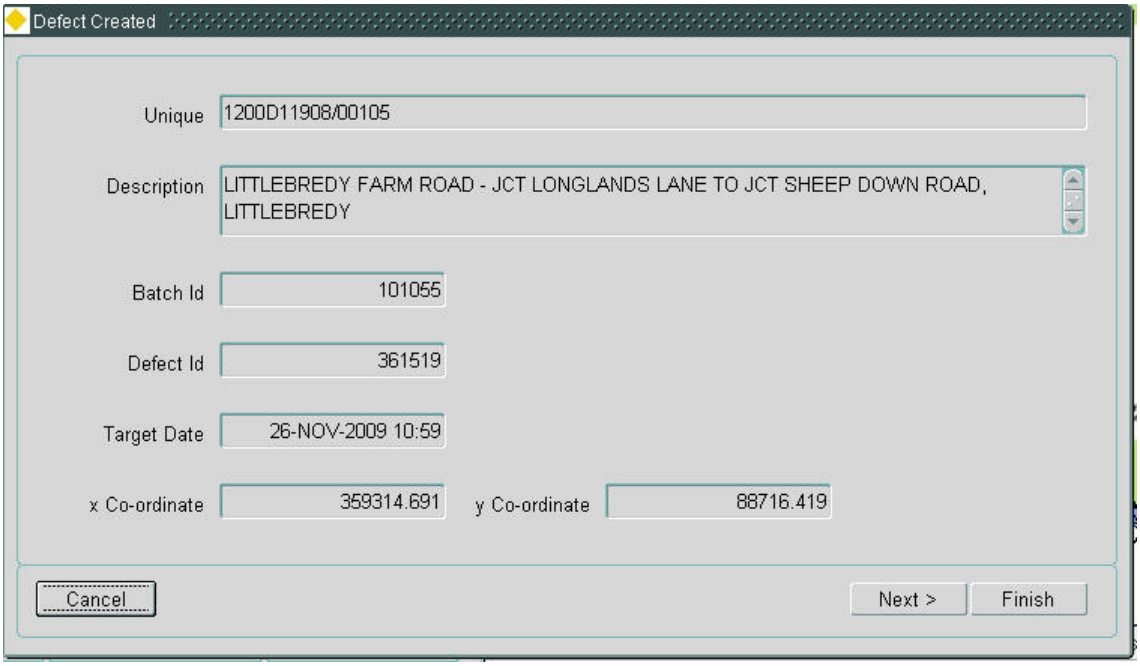

Figure 30 - Defect Created

The following Defect Summary details are displayed:

- Section Name and Description
- Inspection batch Id
- Defect Id
- Target Repair Date
- X and Y coordinates of the Defect

To cancel the Defect creation process press [Cancel], no defect will be created.

Note: If the [Cancel] button is pressed the entire Defect creation process will be cancelled and no Defects will be created.

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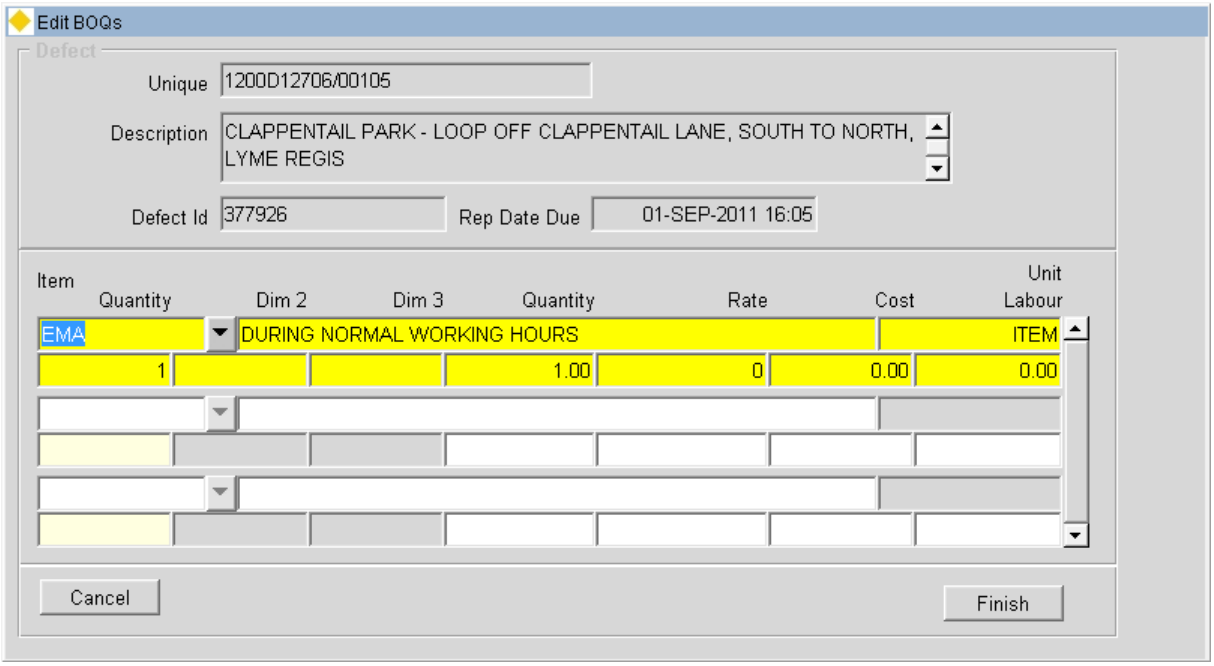

Figure 31 - Edit BOQs

To edit the BOQ items before committing the defect press [Next]. This will call the Edit BOQs window. This is only available when a single repair has been specified. Where multiple repairs have been specified the user will have to finish the defect creation process then use form Inspections – MAI3808 to edit the defect(s).

The Edit BOQs window allows BOQ items and quantities to be amended, added to, removed etc.

To create the Defect press [Finish].

At the end of the Defect creation process a message will be displayed, offering the option to raise a Works Order to include the Defects just raised. To raise a Work Order press [Yes] or [No] to finish the entire process.

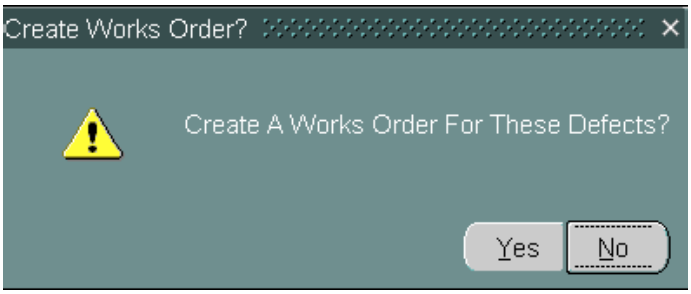

Figure 32 - Create Work Order

If a Works Order is to be raised the form shown below will be displayed.

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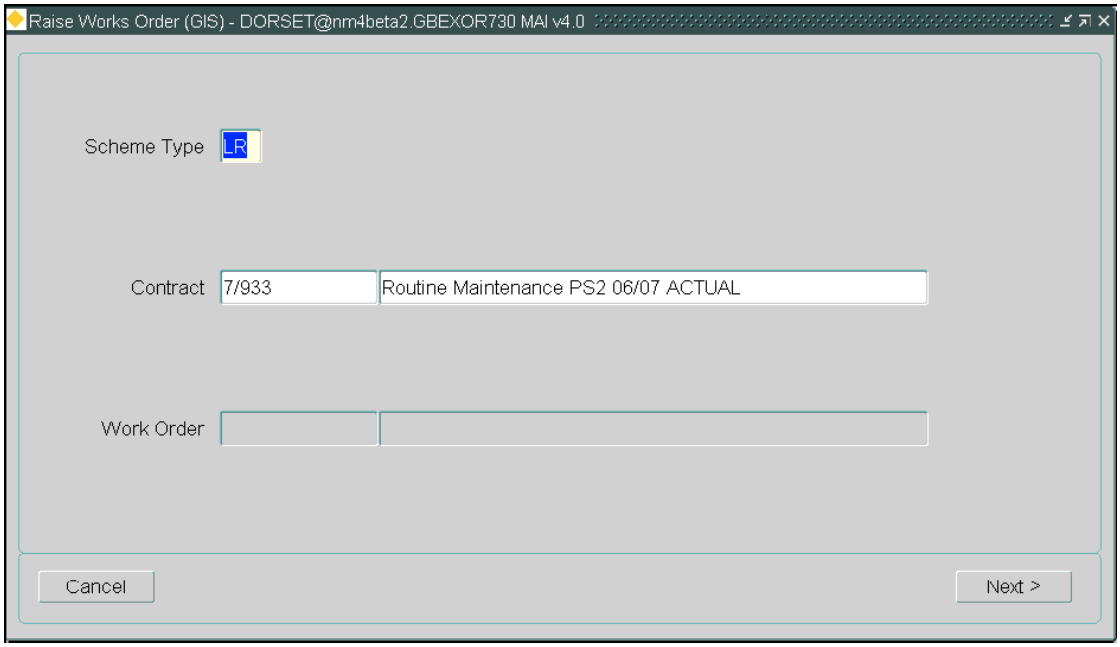

Figure 33 - Raise Work Order

The Raise Works Order form allows the required Scheme Type and Works Order Contract to be selected.

Scheme Type ***(Required,Default)*** ***List***

This is the Scheme Type for the Work Order. The default value is determined by the value set for Product Option DEFSCHTYPL or DEFSCHTYPD (depending on the System Flag set for the Section or Budget Allocation Group on which the Defect is raised). The default value may only be updated if product option DEFSCHTYPU is set to 'Y'.

Contract ***(Required,Default)*** ***List***

This is the Contract used within the Work Order. The default value is determined by the value set for product Option DUMCONCODE. Once the appropriate Contract has been selected press the [Next] Button.

Work Order ***(Default)***

If Product Option WORREFGEN Is set to M – manual, the Work Order Number and Description should be entered. If set to C- Contract based or A – Admin Unit based the work order number will be automatically generated when the [Next >] button is pressed and a valid Budget is selected.

If Multiple Budgets exist for the defect Activity/Scheme Type/Section or Budget Allocation Group combinations, a list will be displayed from which to select the required Budget.

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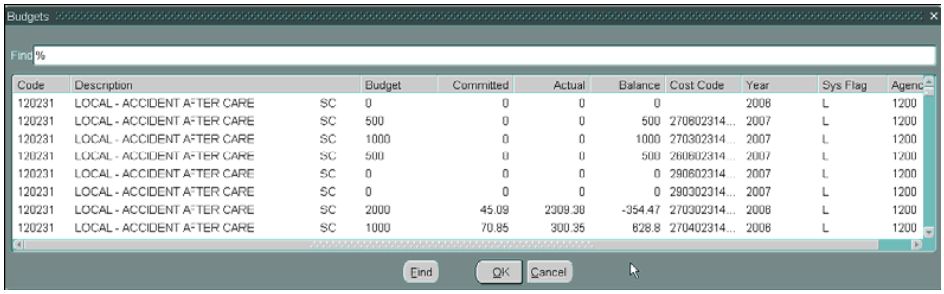
Budgets
Find %
Code Description Budget Committed Actual Balance Cost Code Year Sys Flag Agenc
120231 LOCAL - ACCIDENT AFTER CARE SC 0 0 0 0 2008 L 1200
120231 LOCAL - ACCIDENT AFTER CARE SC 500 0 0 500 270802314... 2007 L 1200
120231 LOCAL - ACCIDENT AFTER CARE SC 1000 0 0 1000 270302314... 2007 L 1200
120231 LOCAL - ACCIDENT AFTER CARE SC 500 0 0 500 260802314... 2007 L 1200
120231 LOCAL - ACCIDENT AFTER CARE SC 0 0 0 0 290602314... 2007 L 1200
120231 LOCAL - ACCIDENT AFTER CARE SC 0 0 0 0 290302314... 2007 L 1200
120231 LOCAL - ACCIDENT AFTER CARE SC 2000 45.09 2309.38 -354.47 270302314... 2008 L 1200
120231 LOCAL - ACCIDENT AFTER CARE SC 1000 70.85 300.35 628.8 270402314... 2008 L 1200
Find
OK
Cancel

Figure 34 - Budgets

Once a Budget has been selected the Number of Defects added to the Work Order will be displayed in a pop-up dialogue. Press [Finish] to create the Work Order.

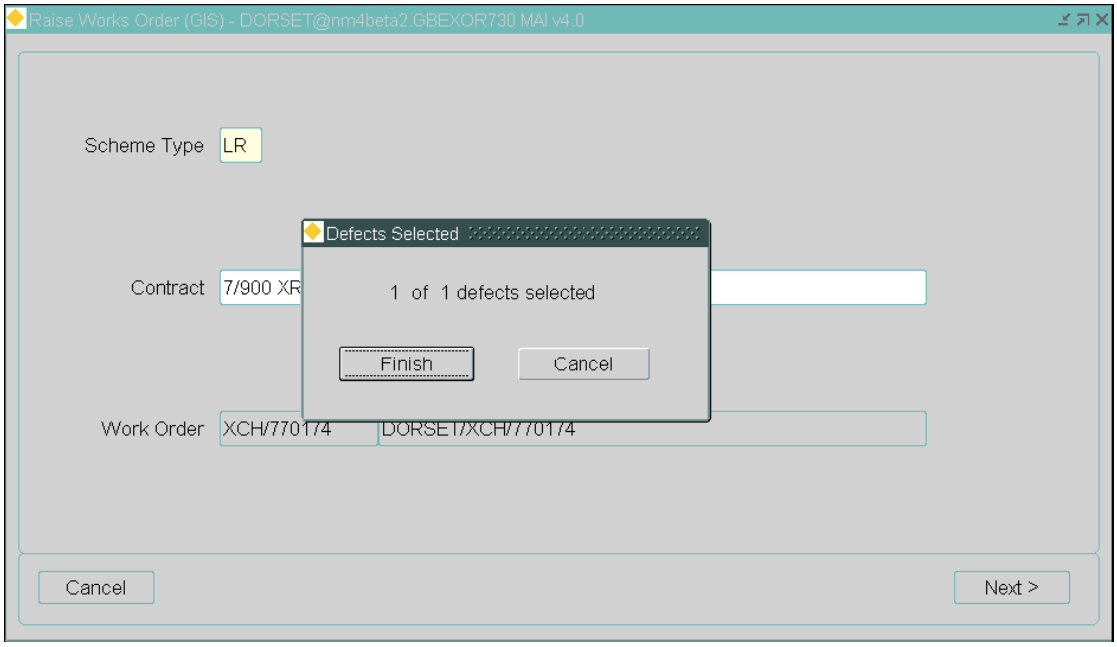

Figure 35 - Raise Work Order

When the [Finish] button is pressed the Work Order (Defects) – MAI3800 module will be called and the Work Order will be displayed.

The Map window will be automatically refreshed and the newly created Defects will be displayed.

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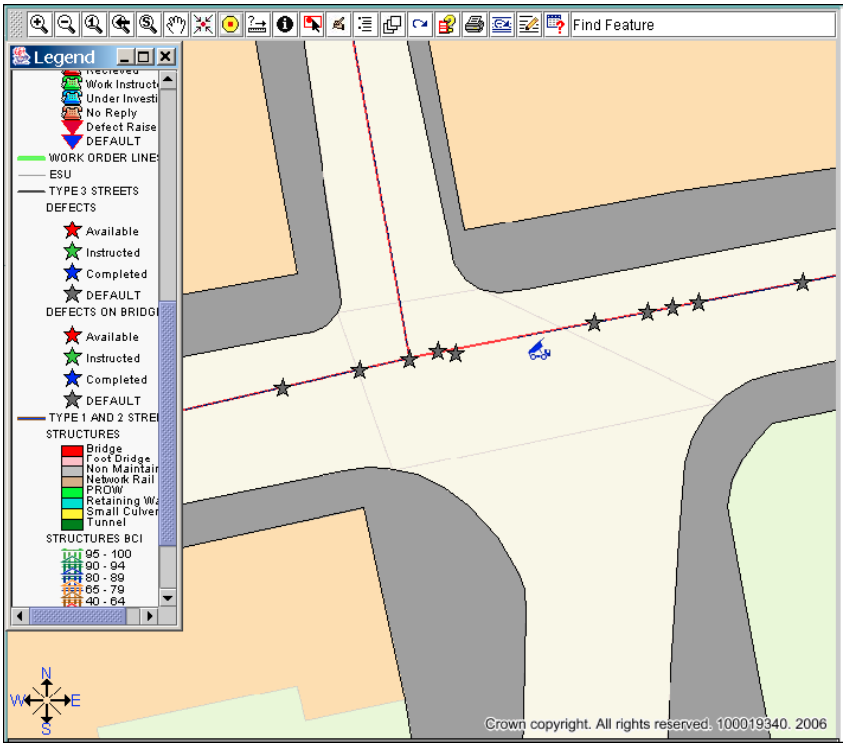

Figure 36 - Locator

To view the full details of a Defect or set of Defects make the Defects Later the Active Layer using the Layer Control Tool, select the required Defects as described earlier and call the Defects – MAI3806 module from the 'Select To' list at the bottom of the Locator Map window. This will call the Defects module and display full details of the selected Defects.

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2.5 Create a Defect on Assets using Locator

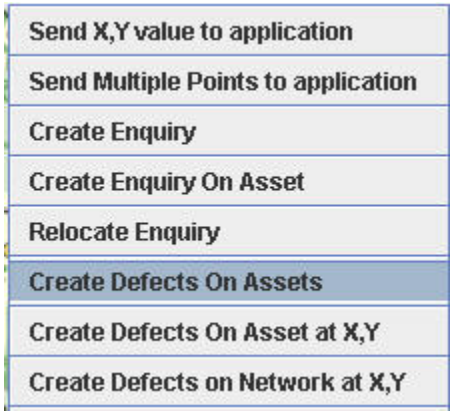
Send X,Y value to application
Send Multiple Points to application
Create Enquiry
Create Enquiry On Asset
Relocate Enquiry
Create Defects On Assets
Create Defects On Asset at X,Y
Create Defects on Network at X,Y

Figure 37 - Feature Edit Menu

This option allows a single Defect to be created against an Asset. If multiple Assets are selected a separate Defect will be created for each. When Defects are created using this option the spatial position of the Defect is derived from the centroid of the associated Asset.

The figures below show examples of Defects raised against Point, Line and Polygon Assets respectively (Defects are shown as Red Stars).

Point feature (Bus Stop) circled. Defect positioned at same X,Y position as feature.

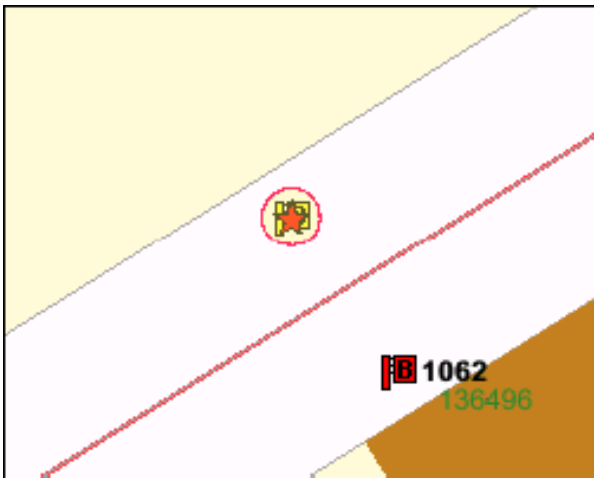

Figure 38 - Point Feature

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Line feature (Lane) highlighted in Green. Defect positioned at mid-point of line

Figure 39 - Line Feature

Polygon feature (Building Unit). Defect positioned at center of Polygon.

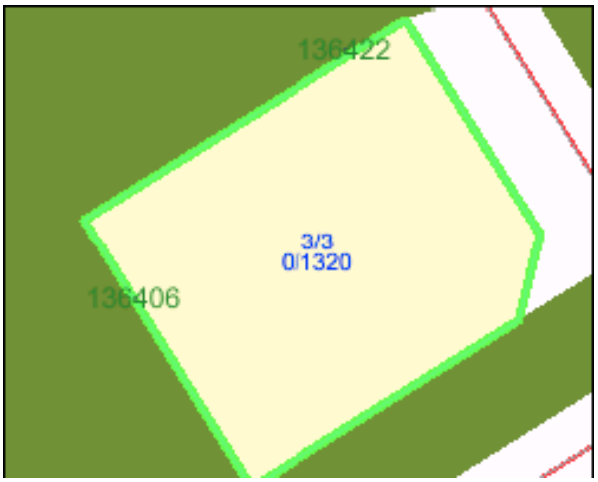

Figure 40 - Polygon Feature

To create a defect on an asset, the asset(s) in question must firstly be selected. This can be done using the Locator Search functionality or by using the Navigation and Feature Selection tools available within the Map window. If a Locator Search is used to select and zoom to the required asset(s), the Asset Layer will automatically be made the Active Layer. When selecting an asset directly from the Map window the appropriate Asset Layer must be the Active Layer. This is done using the Layer Control Tool.

After selecting the asset(s) on which the defect(s) is to be created select the 'Create Defects On Assets' option from the 'Feature Edit Menu' Tool. This will call a form displaying details of the selected assets that allows the User to confirm their selection prior to raising defects. If an asset has been selected erroneously it may be de-selected by unchecking the record selection flag on the right hand side of the form. Only assets that are flagged as 'selected' will have defects raised against them.

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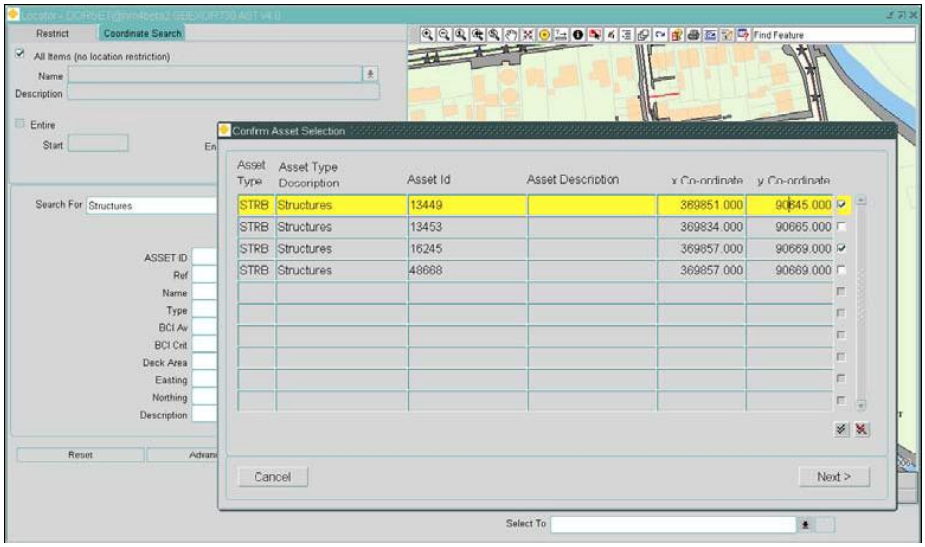

Figure 41 - Confrim Asset Selection

The following Asset Details are displayed on the 'Confirm Asset Selection' window:

- Asset Type Code
- Asset Type Description
- Asset Id (Primary Key)
- Asset Item Description
- X and Y coordinates of the Item centroid position

To continue the process of raising Defects against the selected Assets press the [Next >] button or [Cancel] to abandon the operation.

The 'Defect Details' window will be displayed allowing the defect details to be entered as described under 'Create a Defect on Network at X Y using Locator'.

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2.6 Create Defects on Assets at X Y using Locator

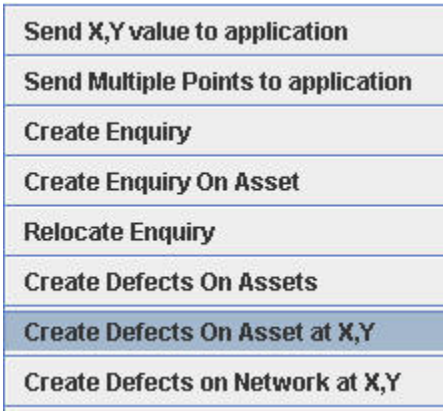
Send X,Y value to application
Send Multiple Points to application
Create Enquiry
Create Enquiry On Asset
Relocate Enquiry
Create Defects On Assets
Create Defects On Asset at X,Y
Create Defects on Network at X,Y

Figure 42 - Feature Edit Menu

This option allows the creation of multiple defects against a single selected asset. Defects created using this option are associated with the selected asset but are located at the X,Y position at which the User clicks and not at the centre of the selected asset as is the case when using the 'Create Defects On Assets' option previously described.

This is useful when creating defects or Work Requests at known locations within a Park or Land Parcel or creating defects adjacent to but not coincident with a Bus Stop or Guard Rail etc. Examples of Defects created at XY locations (shown as Red Stars) within a Park (polygon feature) and adjacent to a Bus Stop (point feature) respectively are shown below.

Note: No tolerance or validation is considered when creating Defects using this option. Therefore Defects may be created at any distance from the selected Asset or created outside the boundary of a selected polygon feature.

Defects created against a Park and located within the park (polygon feature) highlighted in Green.

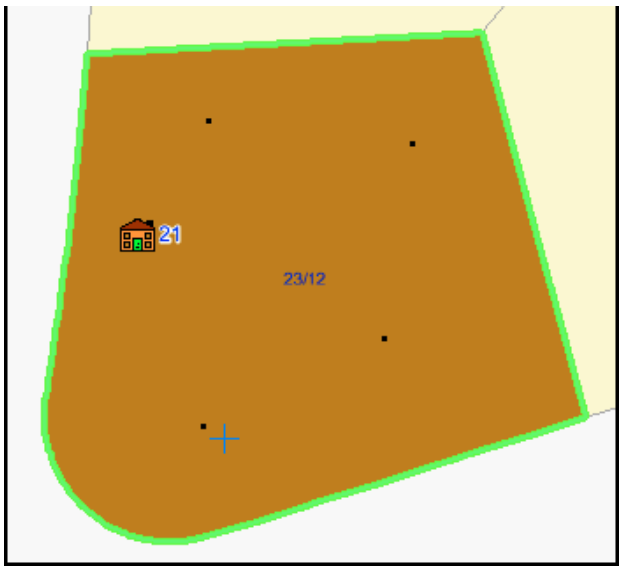

Figure 43 - Polygon Feature

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Defects created against a Bus Stop and located adjacent to the Bus Stop (point feature) circled in red.

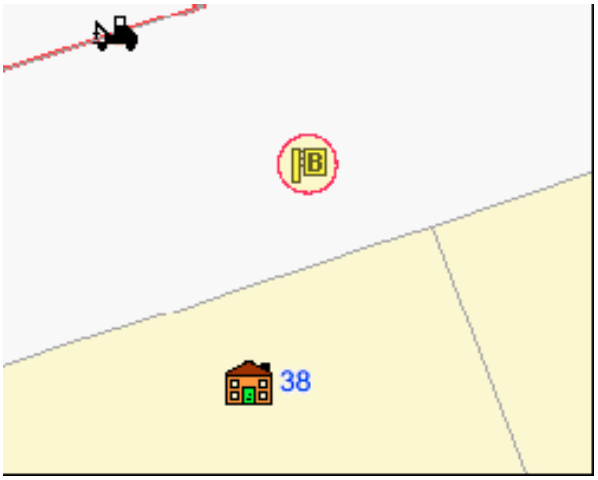

Figure 44 - Point Feature

To Create Defects on an Asset at XY, the asset in question must firstly be selected. This can be done using the Locator Search functionality or by using the Navigation and Feature Selection tools available within the Map window. If a Locator Search is used to select and zoom to the required asset(s), the Asset Layer will automatically be made the Active Layer. When selecting an Asset directly from the Map window the appropriate Asset Layer must be the Active Layer. This is done using the Layer Control tool.

After selecting the asset on which the defects are to be created, select the 'Create Defects On Assets at XY' option from the 'Feature Edit Menu' tool. Click the left mouse button at each of the appropriate XY locations for the defects. A 'dot' will be displayed at each 'click point' to indicate the position at which the defect will be created. To complete the creation of the defects against the asset, click the right mouse button. The Confirm Asset Selection and Defect Details window will be called to allow the defect details to be entered as described under 'Create a Defect on Network at X Y using Locator'.

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2.7 Create a Small Scheme Work Order using Locator

A small scheme work order can be created through Locator for one or more maintenance section. Each section selected will be a separate work order line.

Note: The theme for network must be set up in GISThemes – GIS0010 with a function for MAI3801_NET – Raise Small Scheme Work Order.

To create a small scheme work order on the network, firstly navigate to the appropriate map extent using the Locator Search facilities, the Map window Navigation tools or a combination of both.

Using the 'Layer Control Tool' make the network layer the active layer.

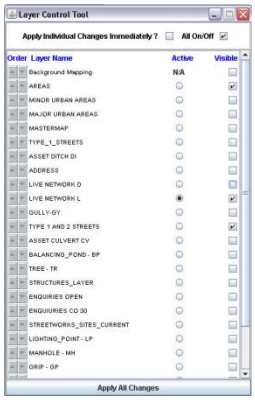

Figure 45 - Layer Control Tool

Using the 'Feature Selection' menu select the sections to be added to the small scheme work order.

Figure 46 - Feature Selection Menu

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The ‘Confirm Selection’ window will appear in the map window. Select [OK] to continue.

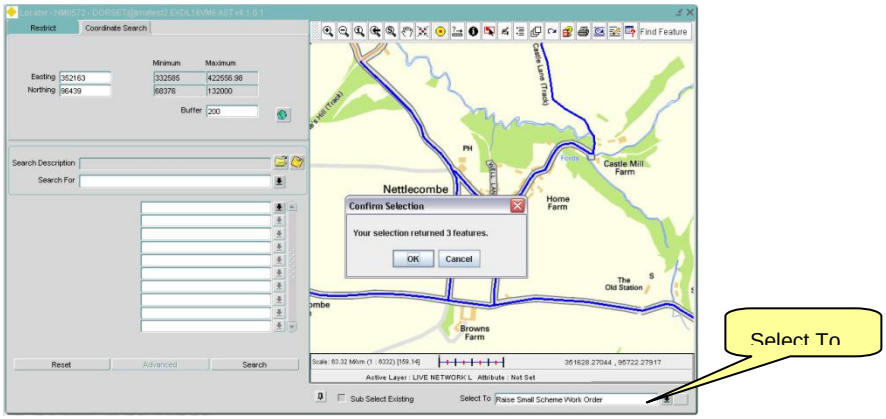

Figure 47 - Confirm Selection

Use the ‘Select To’ drop down list to select ‘Raise Small Scheme Work Order’.

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The ‘Raise Small Scheme Work Order – MAI3801_NET will be called.

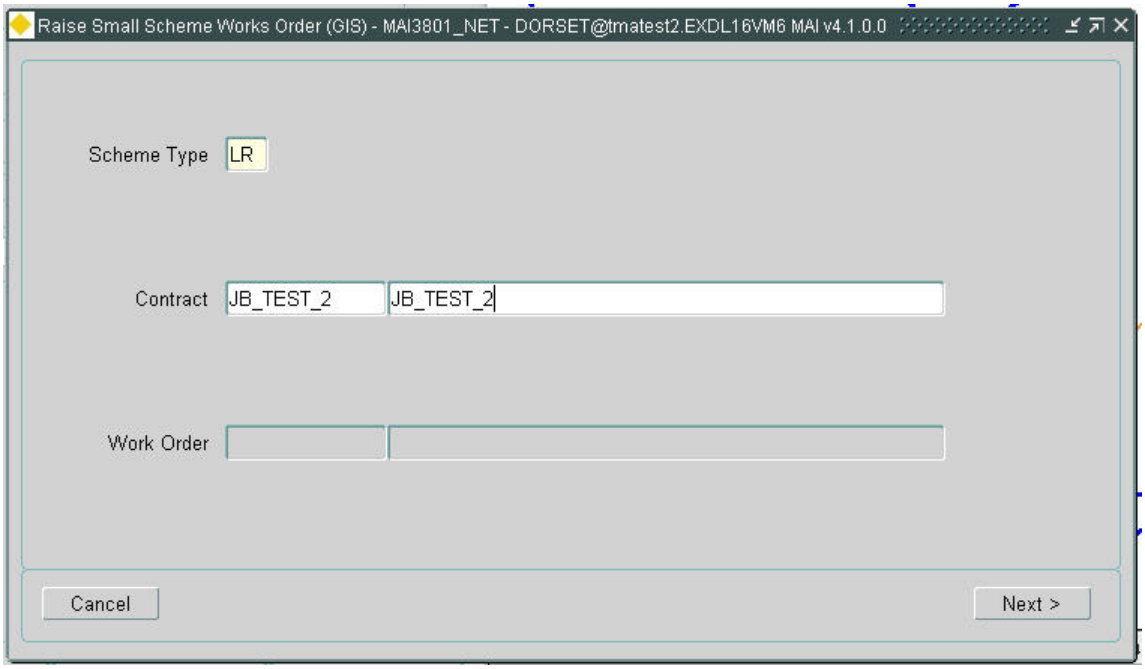

Figure 48 - Raise Work Order

The Raise Small Scheme Works Order form allows the required Scheme Type and Works Order Contract to be selected.

Scheme Type ***(Required,Default)*** ***List***

This is the Scheme Type for the Work Order. The default value is determined by the value set for Product Option DEFSCHTYPL or DEFSCHTYPD (depending on the System Flag set for the Section or Budget Allocation Group on which the Defect is raised). The default value may only be updated if product option DEFSCHTYPU is set to ‘Y’.

Contract ***(Required,Default)*** ***List***

This is the Contract used within the Work Order. The default value is determined by the value set for product Option DUMCONCODE. Once the appropriate Contract has been selected press the [Next] Button.

Work Order ***(Default)***

If Product Option WORREFGEN Is set to M – manual, the Work Order Number and Description should be entered. If set to C- Contract based or A – Admin Unit based the work order number will be automatically generated when the [Next >] button is pressed and a valid Budget is selected.

Press [Next] to call the Budget window. If multiple Budgets exist for the defect Activity/Scheme Type/Section or Budget Allocation Group combinations, a list will be displayed from which to select the required Budget.

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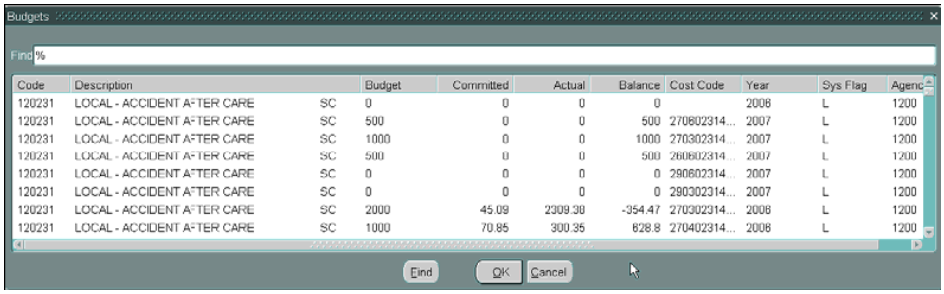
Budgets
Find %
Code
Description
Budget
Committed
Actual
Balance
Cost Code
Year
Sys Flag
Agenc
120231 LOCAL - ACCIDENT AFTER CARE SC 0 0 0 0 2008 L 1200
120231 LOCAL - ACCIDENT AFTER CARE SC 500 0 0 500 270802314... 2007 L 1200
120231 LOCAL - ACCIDENT AFTER CARE SC 1000 0 0 1000 270302314... 2007 L 1200
120231 LOCAL - ACCIDENT AFTER CARE SC 500 0 0 500 260802314... 2007 L 1200
120231 LOCAL - ACCIDENT AFTER CARE SC 0 0 0 0 290602314... 2007 L 1200
120231 LOCAL - ACCIDENT AFTER CARE SC 0 0 0 0 290302314... 2007 L 1200
120231 LOCAL - ACCIDENT AFTER CARE SC 2000 45.09 2309.38 -354.47 270302314... 2008 L 1200
120231 LOCAL - ACCIDENT AFTER CARE SC 1000 70.85 300.35 628.8 270402314... 2008 L 1200
Find
OK
Cancel

Figure 49 - Budgets

Once a Budget has been selected the number or sections added to the Work Order will be displayed in a pop-up dialogue. Press [Finish] to create the Work Order.

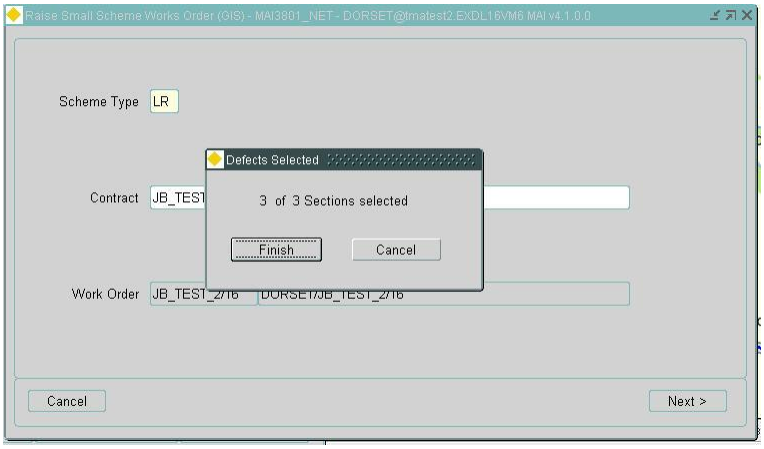

Figure 50 - Raise Work Order

When the [Finish] button is pressed the Work Order (Defects) – MAI3800 module will be called and the Work Order will be displayed.

There will be a work order line for each maintenance section selected.

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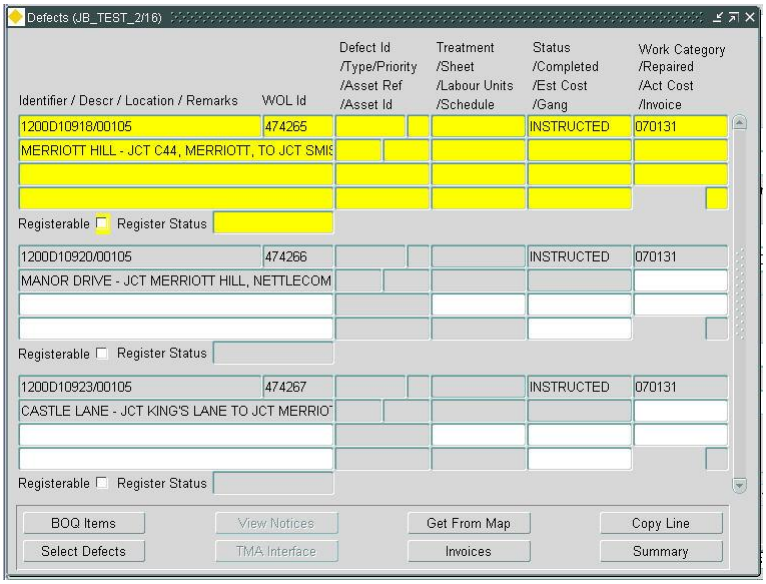

Figure 51 - Work Order Lines

The Map window will be automatically refreshed and the newly created Scheme be displayed.

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2.8 Inspections by Group – MAI3899

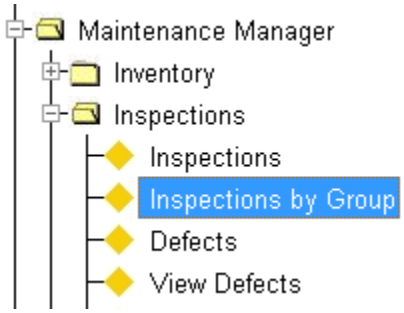

Figure 52 - Inspections by Group Menu Option

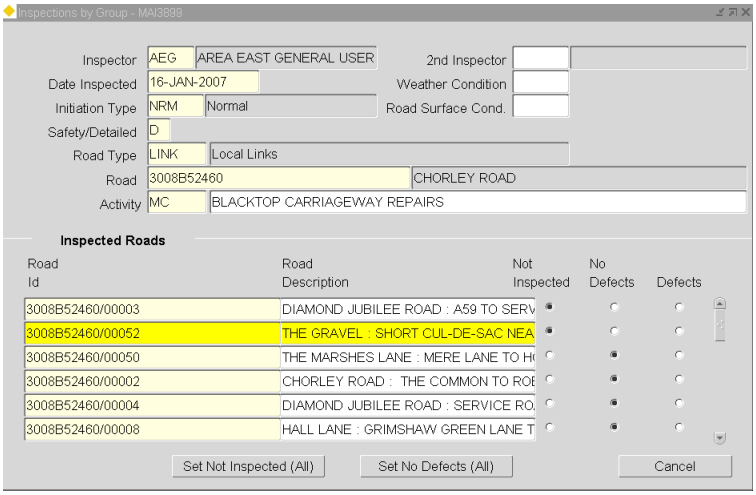

Figure 53 - Inspection by Group

2.8.1 General Information

This form allows inspectors who do not use DCD's to carry out inspections by road group and quickly indicate which sections have been inspected and which of the inspected sections contained defects. This will considerably speed up data entry if a paper based inspection system is being used.

Any road group within the gazetteer are valid for use, it is therefore important that your road group hierarchy is set up correctly to allow you to gain most advantage from the use of this form. Setting up the gazetteer can be viewed in the Network Manager Manual.

Inspections Created using this form can be viewed or edited using Inspections – MAI3808.

For ad-hoc inspections of individual road sections it is more advisable to use Inspections – MAI3808, discussed above.

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2.8.2 Inspections by Group

This window holds basic details of the inspection such as the date it was performed, who carried it out, the weather and road conditions at the time.

Inspector ***(Required)*** ***List***

Select the inspector from the List of Values. These inspectors must be logged on the system and are set up using Users – HIG1832.

2nd Inspector ***(Optional)*** ***List***

If required, select the 2nd inspector from the List of Values.

Date Inspected (Required)

Enter the date the inspection took place. If the inspection has been loaded from a DCD, this field cannot be amended.

Weather Condition ***(Optional)*** ***List***

If known, select the weather at the time of the inspection.

These values can be added to using Domains – HIG9120 and updating the WEATHER_CONDITION option.

Initiation Type ***(Required)*** ***List***

Select the initiation type of this inspection from the list.

These values can be added to using Domains – HIG9120 and updating the INITIATION_TYPE option.

Road Surface Cond. ***(Optional)*** ***List***

If known, enter the road surface condition at the time of the inspection.

These values can be added to using Domains – HIG9120 and updating the SURFACE_CONDITION option.

Safety/Detailed ***(Required)*** ***List***

Enter 'S' for Safety Inspection, 'D' for Detailed Inspection. The default Value for this field is set using Product Option MANINSACT.

Road Type ***(Required)*** ***List***

Enter a valid road group type.

Road ***(Required)*** ***Gaz***

Use the Gazetteer to select the road group to which this inspection applies. A description will be displayed in the adjacent field

Activity ***(Required)*** ***List***

Enter the inspection activity.

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2.8.3 Inspected Roads

A summary of the road sections contained in the selected road group will be displayed.

The following check boxes and buttons allow you to indicate the status of the inspection on each section.

Not Inspected

If the section was not inspected check this box. To check all the boxes select the [Set Not Inspected (All)] button and uncheck those sections that were inspected.

No Defects

If no defects were found on the section check this box, this is the default condition. To check all the boxes select the [Set No Defects (All)]

Defects

If defects were found on the selected road, as this box is checked the Defects window from Inspections – MAI3808 is displayed for defect completion.

The [Cancel] button will clear out the road details in the lower half of the window allowing the user to re-select a road group.

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2.9 Defects – MAI3806

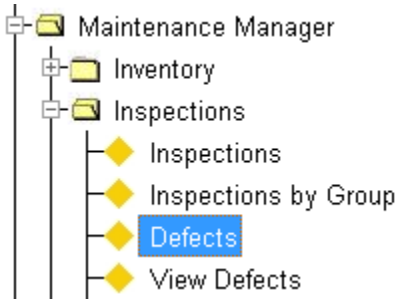

Figure 54 - Defects Menu Option

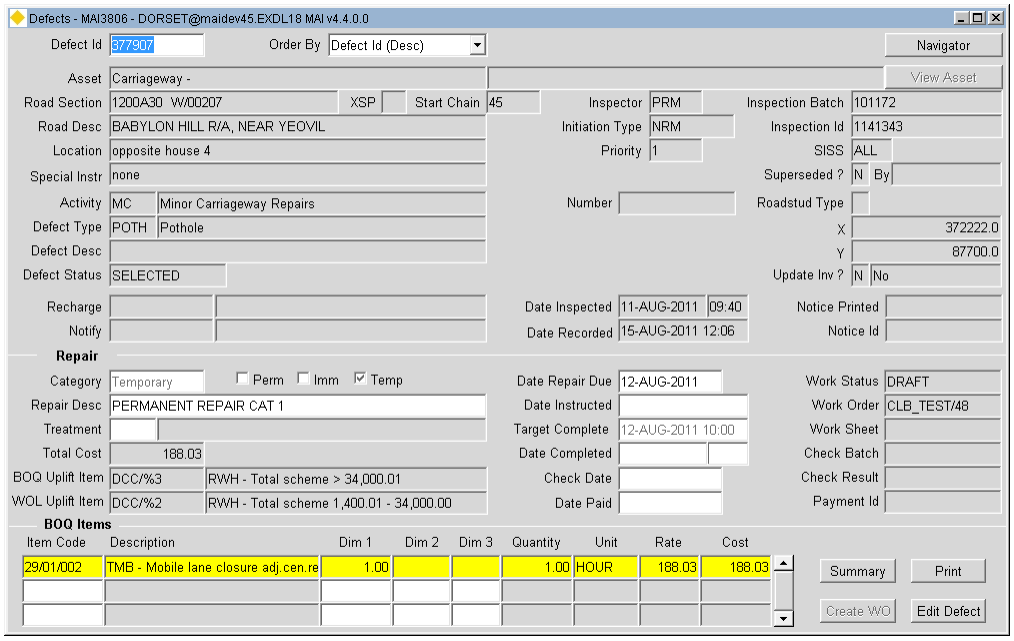

Figure 55 - Defects

2.9.1 General Information

This module is designed to allow you to retrieve and view defects with their associated repairs and BOQ Items by selecting one or more defect details within a query, for example, you may wish to view all available, priority 1 defects.

To query defects back by road section or road group it is recommended that you use View Defects – MAI3810.

2.9.2 Defects

The majority of the defects fields are query only allowing you to enter specific criteria when retrieving defect details. The details of individual defects will be displayed, to view a summary of the defects retrieved following your query press the [Summary] button, this will display a summary of the defects.

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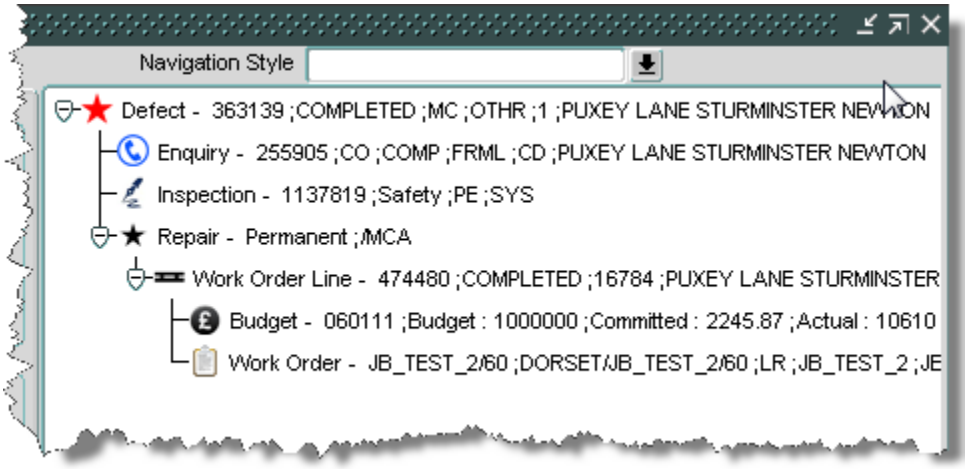
If the Defect has been raised against an Asset press the [View Asset] button to view the Asset Details. This will call the Asset Maintenance – NM0590 module (refer to the Asset Manager User Admin Guide).

To obtain a print of the defect details select the [Print] button, this will run Print Defect Details – MAI3902.

The [Edit Defect] button will call the defects window from Inspections – MAI3808 allowing the update of the defect, repair, boq items if the status of the defect is set to an appropriate value.

The [Create WO] button will allow the defect to be placed onto a work order when reviewing the defect details.

The [Navigator] button opens Navigator which allows the user to view and retrieve data associated with a defect record, an example of this is shown below: Details on the use of navigator can be found in the Query and Navigator User Manual.


Navigation Style
Defect - 363139 ;COMPLETED ;MC ;OTHR ;1 ;PUXEY LANE STURMINSTER NEWTON
Enquiry - 255905 ;CO ;COMP ;FRML ;CD ;PUXEY LANE STURMINSTER NEWTON
Inspection - 1137819 ;Safety ;PE ;SYS
Repair - Permanent ;MCA
Work Order Line - 474480 ;COMPLETED ;16784 ;PUXEY LANE STURMINSTER
Budget - 060111 ;Budget : 1000000 ;Committed : 2245.87 ;Actual : 10610
Work Order - JB_TEST_2/60 ;DORSET/JB_TEST_2/60 ;LR ;JB_TEST_2 ;JE

Order By (Optional) List

This will allow the ordering of the query by the criteria selected.

2.9.3 Repair

The repair details for the selected defect will be displayed, if the check boxes indicate that more than one repair exists for the selected defect, select the repair category field followed by the [Next] or [Previous] buttons to view the additional repairs.

2.9.4 BOQ Items

The bill of quantity items for the selected repair will be displayed.

These BOQ items will have been generated in one of the following ways:

Entered into the Data Capture Device by the inspector at the time of the inspection..

Automatically by the use of Treatment Models – MAI3814. (Maintenance Manager System Admin Manual)

When the inspection is loaded onto the system either manually or by the use of a DCD, the BOQ items can be added once the relevant inspection is retrieved.

These BOQ items can be modified and added to in the following ways:

Retrieve the inspection containing the relevant defect.

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When the defect is placed on a works order.

The following additional information will be displayed for the selected BOQ item when the [Expand] key is selected.

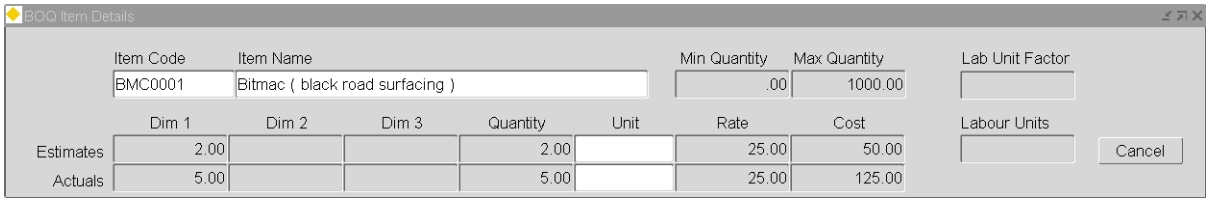

Figure 56 - BOQ Item details

This window allows you to compare the actual values vs. the original estimated values to see any variation. If the estimated values are blank and the actual values are populated the schedule item was added on completion.

Select the [Cancel] button to return to the previous window.

BOQ Items are set up and maintained using Standard Items – MAI3888.

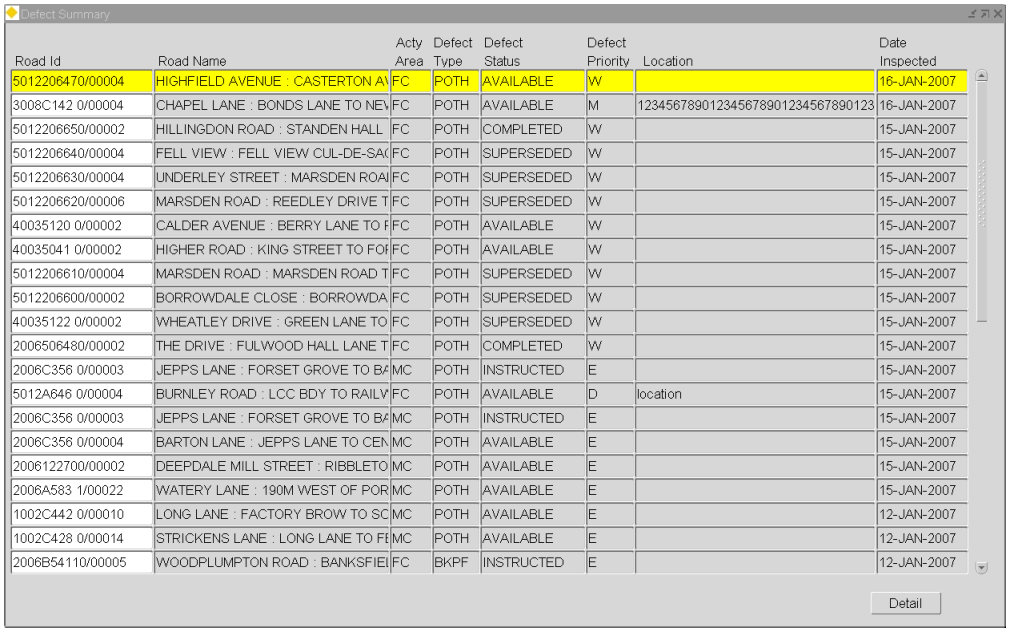
Defect Summary
Road Id
Road Name
Acty Area
Defect Type
Defect Status
Defect Priority
Location
Date Inspected
5012206470/00004 HIGHFIELD AVENUE : CASTERTON AV FC POTH AVAILABLE W 16-JAN-2007
3008C142 0/00004 CHAPEL LANE : BONDS LANE TO NEV FC POTH AVAILABLE M 12345678901234567890123456789012345 16-JAN-2007
5012206650/00002 HILLINGDON ROAD : STANDEN HALL FC POTH COMPLETED W 15-JAN-2007
5012206640/00004 FELL VIEW : FELL VIEW CUL-DE-SA(FC POTH SUPERSEDED W 15-JAN-2007
5012206630/00004 UNDERLEY STREET : MARSDEN ROA FC POTH SUPERSEDED W 15-JAN-2007
5012206620/00006 MARSDEN ROAD : REEDLEY DRIVE T FC POTH SUPERSEDED W 15-JAN-2007
40035120 0/00002 CALDER AVENUE : BERRY LANE TO F FC POTH AVAILABLE W 15-JAN-2007
40035041 0/00002 HIGHER ROAD : KING STREET TO FOI FC POTH AVAILABLE W 15-JAN-2007
5012206610/00004 MARSDEN ROAD : MARSDEN ROAD T FC POTH SUPERSEDED W 15-JAN-2007
5012206600/00002 BORROWDALE CLOSE : BORROWDA FC POTH SUPERSEDED W 15-JAN-2007
40035122 0/00002 WHEATLEY DRIVE : GREEN LANE TO FC POTH SUPERSEDED W 15-JAN-2007
2006506480/00002 THE DRIVE : FULWOOD HALL LANE T FC POTH COMPLETED W 15-JAN-2007
2006C356 0/00003 JEPPS LANE : FORSET GROVE TO BA MC POTH INSTRUCTED E 15-JAN-2007
5012A646 0/00004 BURNLEY ROAD : LCC BDY TO RAILV FC POTH AVAILABLE D location 15-JAN-2007
2006C356 0/00003 JEPPS LANE : FORSET GROVE TO BA MC POTH INSTRUCTED E 15-JAN-2007
2006C356 0/00004 BARTON LANE : JEPPS LANE TO CEN MC POTH AVAILABLE E 15-JAN-2007
2006122700/00002 DEEPDALE MILL STREET : RIBBLETO MC POTH AVAILABLE E 15-JAN-2007
2006A583 1/00022 WATERY LANE : 190M WEST OF POR MC POTH AVAILABLE E 15-JAN-2007
1002C442 0/00010 LONG LANE : FACTORY BROW TO SC MC POTH AVAILABLE E 12-JAN-2007
1002C428 0/00014 STRICKENS LANE : LONG LANE TO FI MC POTH AVAILABLE E 12-JAN-2007
2006B54110/00005 WOODPLUMPTON ROAD : BANKSFIEL FC BKPF INSTRUCTED E 12-JAN-2007
Detail

Figure 57 - Defect Summary

2.9.5 Defect Summary

This window will display summary information for the defects retrieved in the previous window, to view the details of a defect, select the required defect then press the [Detail] button.

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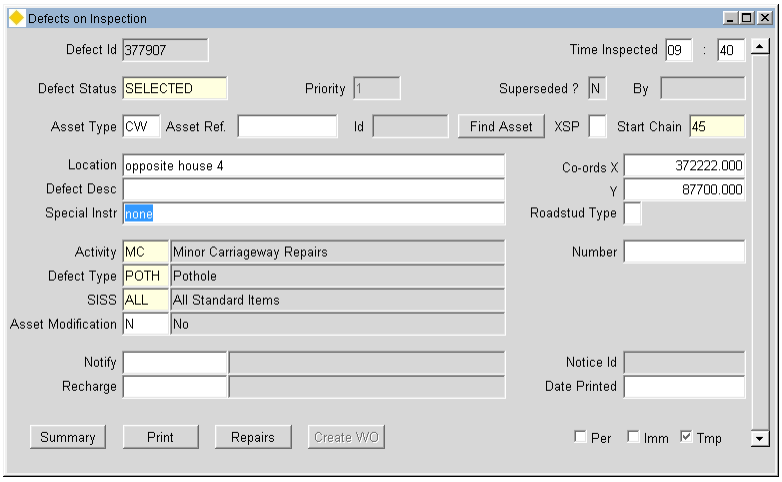

Figure 58 - Edit Defect

2.9.6 Edit Defect

The [Edit Defects] button will call the Defects window from form Inspections – MAI3808. Updates to the defect, repair, BOQ items can be made if the status of the defect is set to the appropriate value.

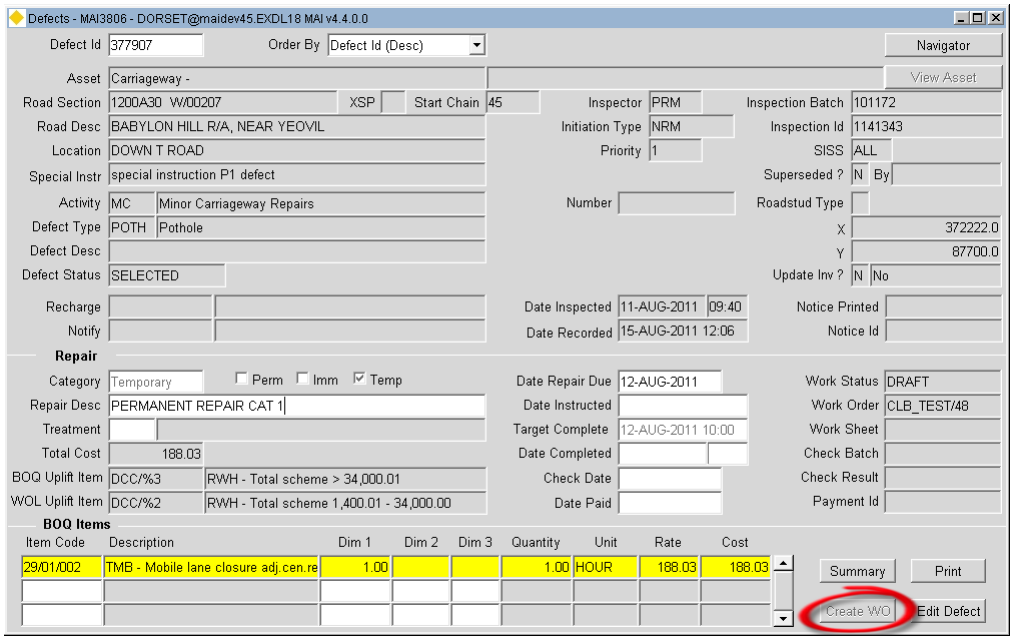

Figure 59 - Create Work Order

2.9.7 Create Work Order

Selecting the [Create WO] button will call form Raise Work Order – MAI3801.

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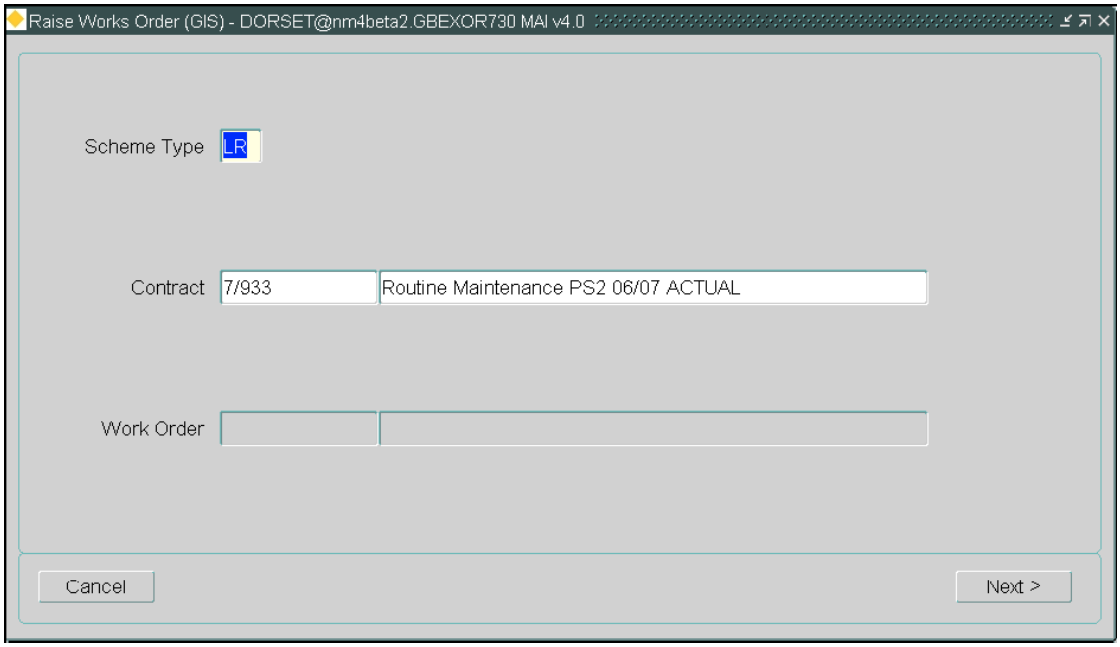

Figure 60 - Raise Work Order

The Raise Works Order form allows the required Scheme Type and Works Order Contract to be selected.

Scheme Type ***(Required,Default)*** ***List***

This is the Scheme Type for the Work Order. The default value is determined by the value set for Product Option DEFSCHTYPL or DEFSCHTYPD (depending on the System Flag set for the Section or Budget Allocation Group on which the Defect is raised). The default value may only be updated if product option DEFSCHTYPU is set to 'Y'.

Contract ***(Required,Default)*** ***List***

This is the Contract used within the Work Order. The default value is determined by the value set for product Option DUMCONCODE. Once the appropriate Contract has been selected press the [Next] Button.

Work Order ***(Default)***

If Product Option WORREFGEN Is set to M – manual, the Work Order Number and Description should be entered. If set to C- Contract based or A – Admin Unit based the work order number will be automatically generated when the [Next >] button is pressed and a valid Budget is selected.

If Multiple Budgets exist for the defect Activity/Scheme Type/Section or Budget Allocation Group combinations, a list will be displayed from which to select the required Budget.

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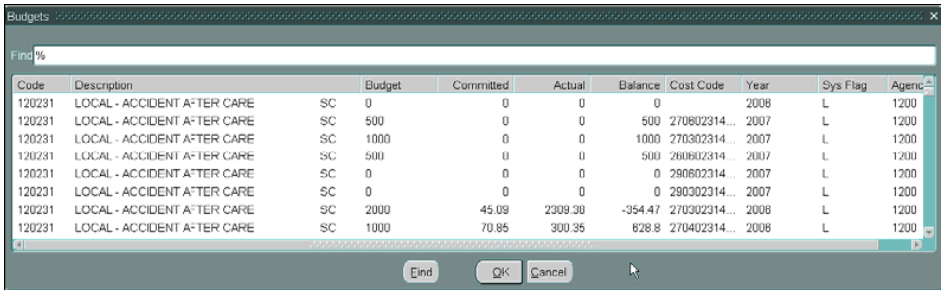
Budgets
Find %
Code Description Budget Committed Actual Balance Cost Code Year Sys Flag Agenc
120231 LOCAL - ACCIDENT AFTER CARE SC 0 0 0 0 2008 L 1200
120231 LOCAL - ACCIDENT AFTER CARE SC 500 0 0 500 270802314... 2007 L 1200
120231 LOCAL - ACCIDENT AFTER CARE SC 1000 0 0 1000 270302314... 2007 L 1200
120231 LOCAL - ACCIDENT AFTER CARE SC 500 0 0 500 260802314... 2007 L 1200
120231 LOCAL - ACCIDENT AFTER CARE SC 0 0 0 0 290602314... 2007 L 1200
120231 LOCAL - ACCIDENT AFTER CARE SC 0 0 0 0 290302314... 2007 L 1200
120231 LOCAL - ACCIDENT AFTER CARE SC 2000 45.09 2309.38 -354.47 270302314... 2008 L 1200
120231 LOCAL - ACCIDENT AFTER CARE SC 1000 70.85 300.35 628.8 270402314... 2008 L 1200
Find
OK
Cancel

Figure 61 - Budgets

Once a Budget has been selected the Number of Defects added to the Work Order will be displayed in a pop-up dialogue. Press [Finish] to create the Work Order.

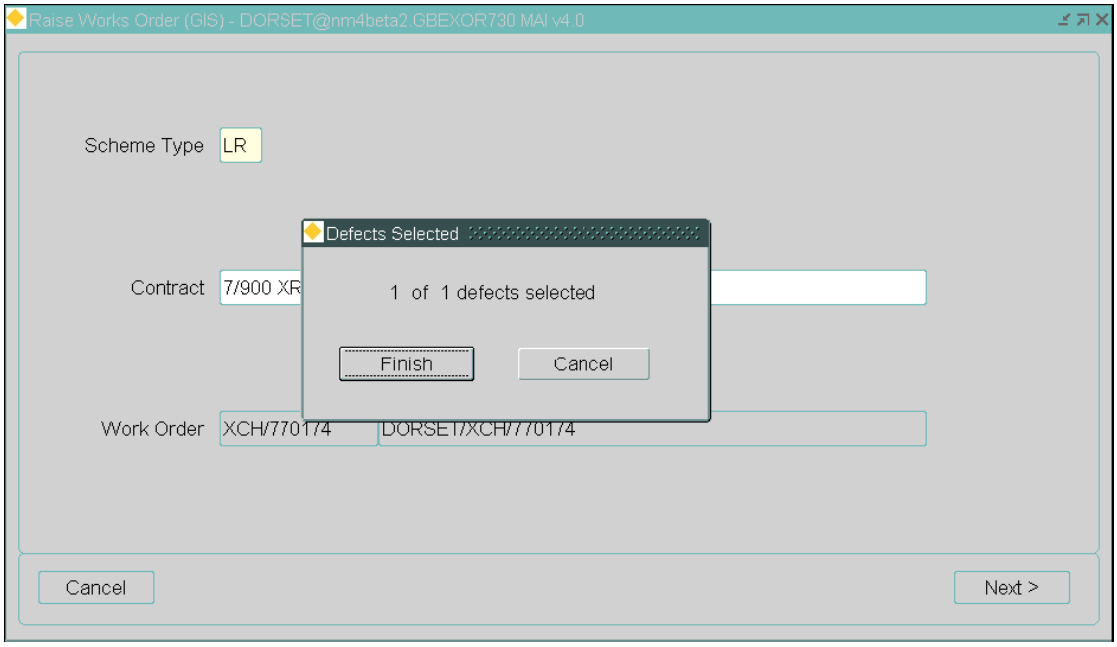

Figure 62 - Raise Work Order

When the [Finish] button is pressed the Work Order (Defects) – MAI3800 module will be called and the Work Order will be displayed.

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2.10 View Defects – MAI3810

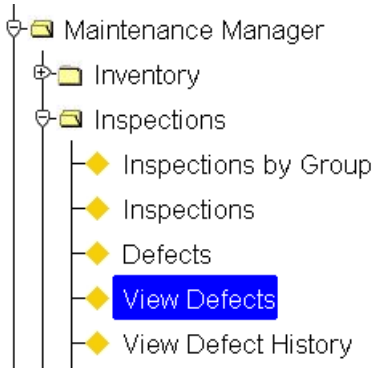

Figure 63 - View Defects Menu Option

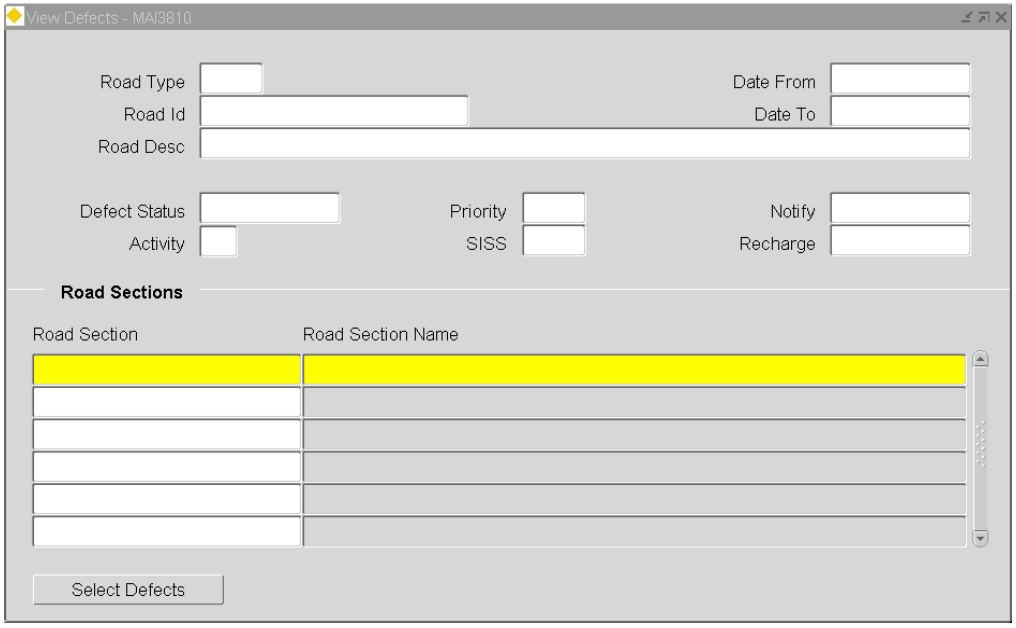

Figure 64 - View Defects

2.10.1 General Information

This module is intended to allow the user to view defect details by any road group or road section. Adding additional criteria can restrict the numbers of defects retrieved.

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2.10.2 View Defects

Road Type ***(Required)*** ***List***

The road type entered here will restrict the road groups displayed when the [Gazetteer] button is selected.

Road Id ***(Required)*** ***Gaz***

Enter the required road id, selecting the [Gazetteer] button will display the full gazetteer, this can be restricted by either entering a value in the Road Type field or by entering some criteria in this field.

For example, if you enter %12% followed by [Gazetteer] the gazetteer will display all road sections and road groups containing the above selection criteria.

Road Desc ***(Required)*** ***Gaz***

Enter the road description. As above, if you enter %GIANTS% followed by [Gazetteer] the gazetteer will retrieve all road sections and road groups with GIANTS in the description.

This is very useful if you have set your gazetteer up in inspection areas, routes or zones because you do not have to remember which group each section is in.

All the following fields can be used in combination to further restrict the defects retrieved when the [Select Defects] button is selected

Date From ***(Optional)***

Enter the date from which you wish to search for defects. This field can be used in conjunction with the next field for searching for defects in a date range.

Date To ***(Optional)***

Enter the date to which you wish to search for defects.

Defect Status ***(Optional)*** ***List***

Enter a defect status code.

Activity ***(Optional)*** ***List***

Enter an inspection activity code.

Priority ***(Optional)*** ***List***

Enter a defect priority code.

SISS ***(Optional)*** ***List***

Enter a Standard Item Sub Section code.

Notify ***(Optional)*** ***List***

Enter a notifiable organisation.

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Recharge	*(Optional)*	*List*

Enter a rechargeable organisation.

Once the required selection criteria has been entered there are 2 options available:

Selecting the [Select Defects] button will display all defects meeting the criteria entered for all road sections in the selected road group, these defects will initially be displayed as a summary, select the [Detail] button to view the detail using Defects – MAI3806.

Selecting a field in the lower half of the window will display all the road sections in the selected road group, these can be scrolled through until the required section is found before selecting the [Select Defects] button. This will display all the defects meeting the criteria entered for the selected road section, these defects will initially be displayed as a summary, select the [Detail] button to view the detail using Defects – MAI3806

2.10.3 Select Defects

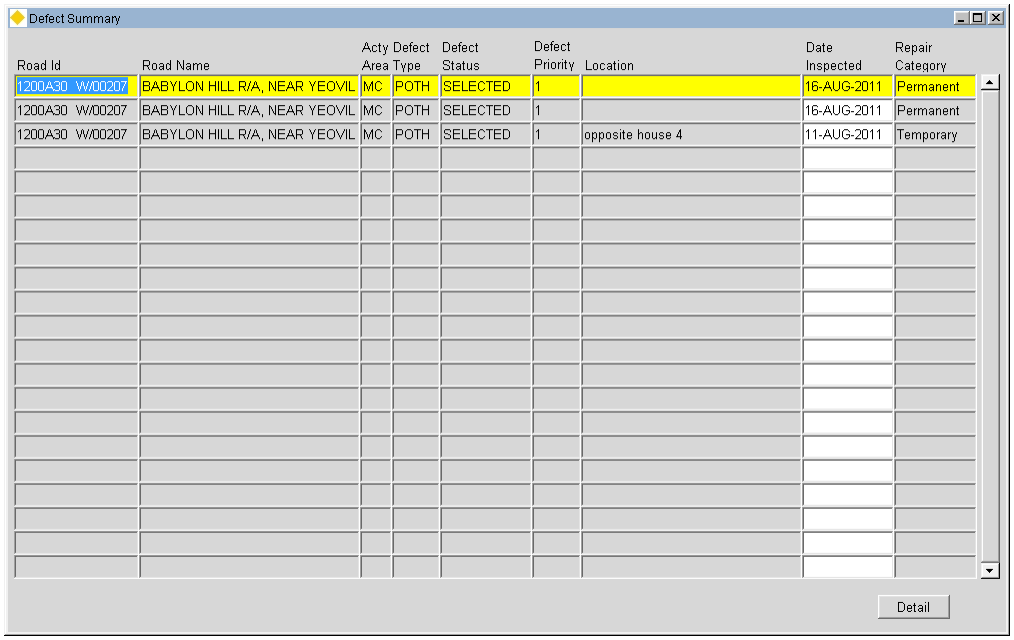

Figure 65 - Select Defects button

The above window will be displayed when the [Select Defects] button is selected. Select the [Detail] button to view the detail using Defects – MAI3806

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2.11 Match Duplicate Defects – MAI2730

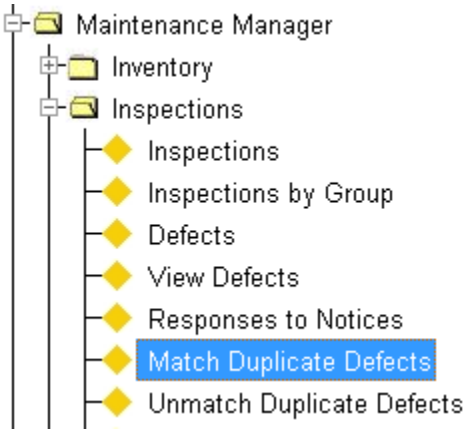

Figure 66 - Match Duplicate Defects Menu Option

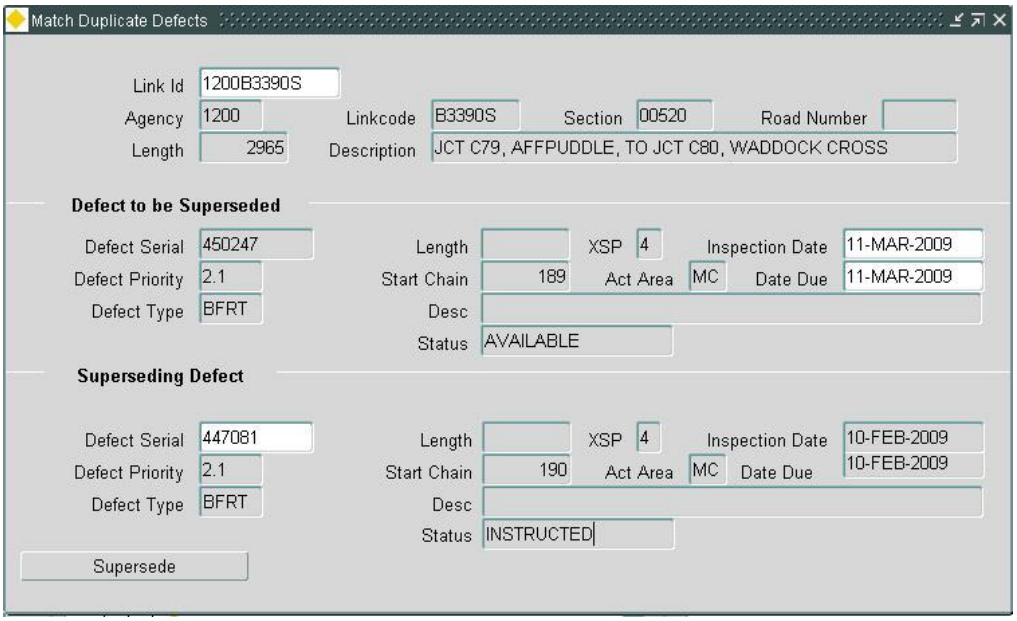

Figure 67 - Match Duplicate Defects

2.11.1 General Information

This form is used to identify defects that have been entered into highways by exor at the same location more than once. This can occur as a result of two separate inspections being carried out on the same section of road identifying the same defect at different times.

Defects that have also been matched automatically following an inspection using a DCD by virtue of the values set in the form Defect Superseding Rules – MAI4406 can also be viewed using this module.

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2.11.2 Section Details

When you enter this window, the cursor sits in the Link ID field waiting for you to enter your selection criteria followed by [Execute Query] to retrieve details of the required section. The following fields can be used with wildcards to query back existing section details:

- Link ID
- Agency
- Linkcode
- Section
- Road Number
- Length
- Description

2.11.3 Defect to be Superseded

All available defects on the selected road section will be queried back, if you are manually superseding a defect you will probably know the defect id of the defect to be superseded. Select [Enter Query], enter the defect id in the Defect Serial Number field followed by [Execute Query] to retrieve the defect.

The following information will be displayed:

- Defect Serial Number
- Length of the Defect
- Cross Sectional Position of the Defect
- Inspection Date
- Defect Priority
- Start Chainage
- Activity Area
- Repair Date Due
- Defect Type
- Description
- Defect Status

2.11.4 Superseding Defect

All available and instructed defects for the selected road section will be queried back, once again, if you are manually superseding a defect you will probably know the defect id of the defect to superseded the defect selected above. Select [Enter Query], enter the defect id in the Defect Serial Number field followed by [Execute Query] to retrieve the defect.

The following information will be displayed:

- Defect Serial Number
- Length of the Defect
- Cross Sectional Position of the Defect
- Inspection Date
- Defect Priority
- Start Chainage
- Activity Area

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- Repair Date Due
- Defect Type
- Description.
- Defect Status

Viewing both defects together will allow you to make a good comparison of the two defects. If you are satisfied with your selection select the [Supersede Defect] button. If two defects have been mistakenly matched, use Unmatch Duplicate Defect – MAI2760 to unmatch them.

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2.12 Unmatch Duplicate Defects – MAI2760

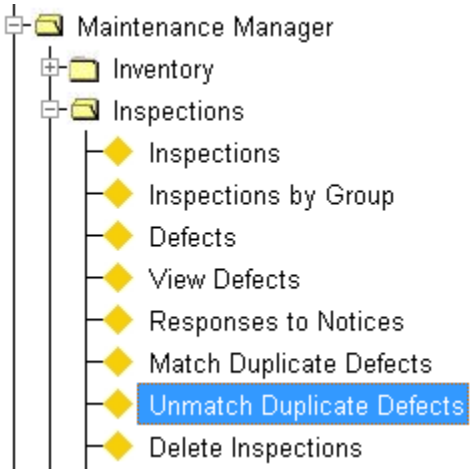

Figure 68 - Unmatch Duplicate Defects Menu Option

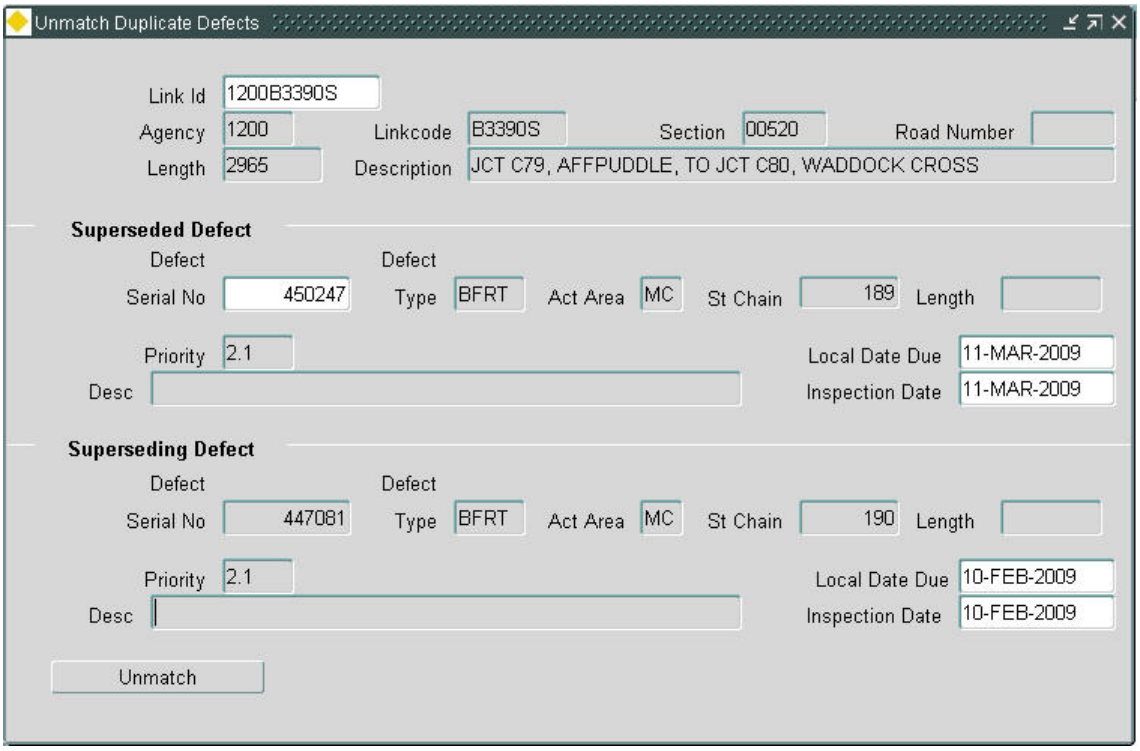

Figure 69 - Unmatch Duplicate Defects

2.12.1 General Information

This form is used to correct any defects that have been matched in error either automatically by the system or when using Match Duplicate Defects – MAI2730.

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2.12.2 Section Details

When you enter this window, the cursor sits in the Link ID field waiting for you to enter your selection criteria followed by [Execute Query] to retrieve details of the required section. The following fields can be used with wildcards to query back existing section details:

- Link ID
- Agency
- Linkcode
- Section
- Road Number
- Length
- Description

When a road section has been retrieved, all defects that have been superseded will be retrieved with their superseding defect, select the [Unmatch] button to unmatch the selected defects.

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2.13 Delete Inspections – MAI2470

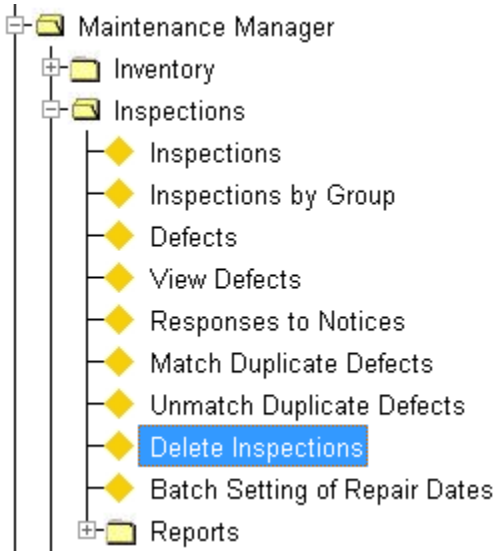

Figure 70 - Delete Inspections Menu Option

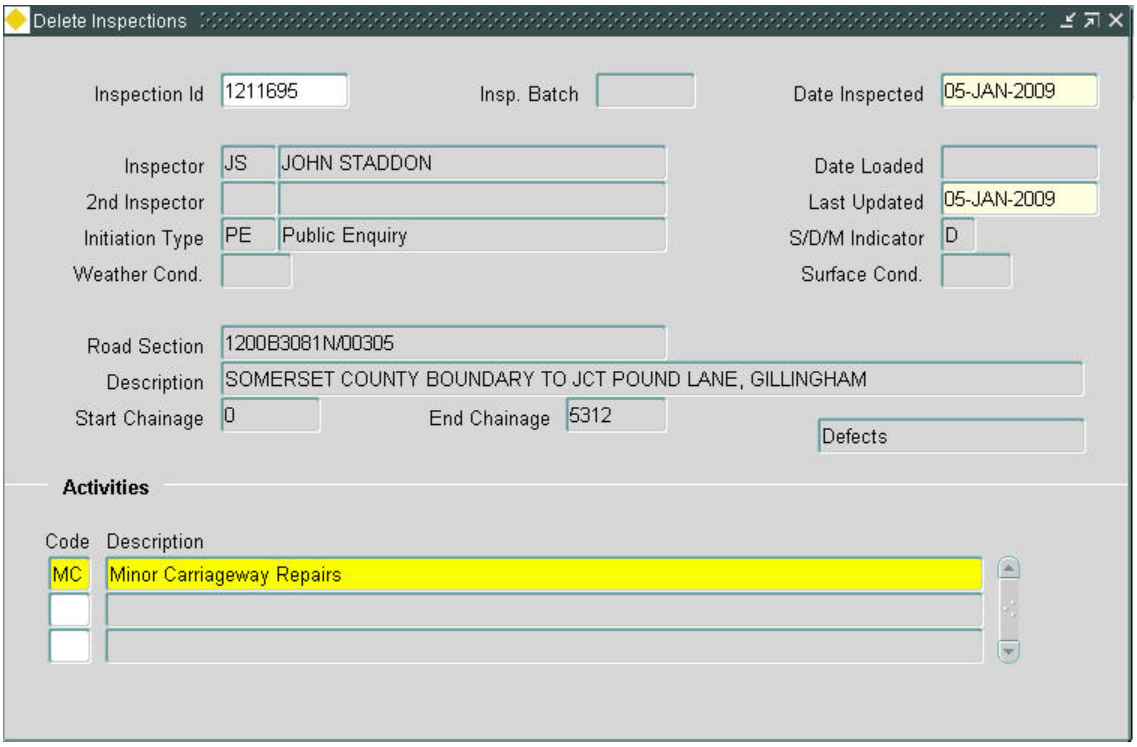

Figure 71 - Delete Inspection

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2.13.1 General Information

This form will allow you to delete an inspection as well as all the defects that were identified during that inspection. An inspection can be deleted if it was entered erroneously and nothing has happened to the contents of that inspection. If any defects belonging to an Inspection have been selected on a Works Order, or superseded by a subsequent inspection then the Inspection cannot be Deleted.

Use this module with caution because no history of the deletion is retained on the system.

2.13.2 Delete Inspections

On entry to this window, the cursor sits in the Inspection Id field waiting for you to enter some selection criteria to identify the inspection to be deleted. Enter your selection criteria and press [Execute Query] to retrieve the inspection(s). Press [Delete Record] to delete the inspection details.

Note that once deleted, an inspection cannot be ‘undeleted’. As such, care should be exercised when using this form.

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2.14 Batch Setting of Repair Dates – MAI2775

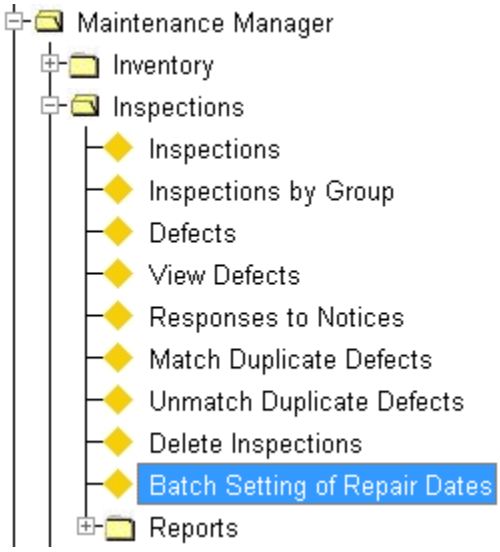

Figure 72 - Batch Setting of Repair Dates Menu Option

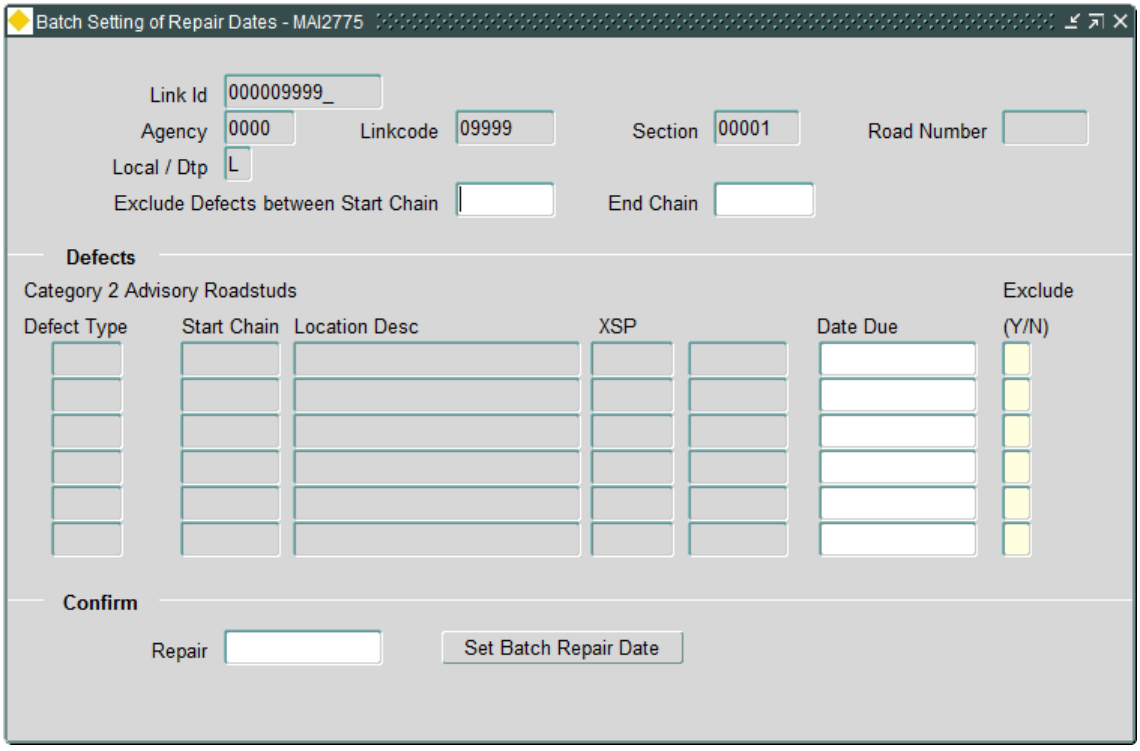

Figure 73 - Batch Setting of Repair Dates

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2.14.1 General Information

This form is used to initiate permanent repair procedures for defective advisory roadstuds.

2.14.2 Section

Retrieve the section on which the defective roadstuds have occurred using the following fields:

- Link ID
- Agency
- Linkcode
- Section
- Local/DTp

Exclude Defects Between St Chain ***(Optional)***

Enter the start chainage number from which defects should be excluded. If end chainage is entered then start chainage must be entered too.

End Chain ***(Optional)***

Enter the end chainage number up to which defects should be excluded. If start chainage is entered then end chainage must be entered too.

2.14.3 Defects

The details of the defective roadstuds found can be flagged for exclusion or inclusion in the permanent repair program.

Category 2 Defect Type ***(Query Only)***

Use this field to retrieve the Category 2 defect code for the defective roadstuds.

Advisory Roadstuds St Chain ***(Query Only)***

Use this field to retrieve the start chainage for advisory roadstuds.

Location Desc ***(Display Only)***

The location of the advisory roadstuds will be displayed.

XSP ***(Query Only)***

When you query this field the cross sectional position of the defective roadstuds will be displayed.

Number ***(Query Only)***

When you query this field, the number of defective roadstuds for the section will be retrieved.

Date Due ***(Display Only)***

The date on which the roadstuds are due to be repaired is displayed. This date is arrived at by adding the three months to the date that the last defective roadstud was discovered.

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Exclude [Y/N] ***(Required)***

Enter either 'Y' or 'N' which denote exclusion or inclusion from the batch setting of repair dates for the defective roadstuds.

2.14.4 Confirm

Select the [Set Batch Repair Date] button to confirm the selected roadstuds are to be repaired.

Repair ***(Display Only)***

The date on which the roadstuds are due to be repaired is displayed. This date is arrived at by adding the three months to the date that the last defective roadstud was discovered.

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2.15 Responses to Notices – MAI3816

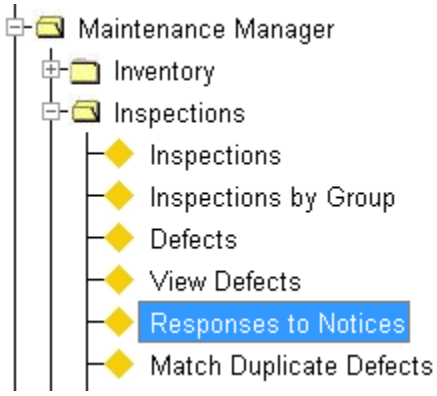

Figure 74 - Responses to Notices Menu Option

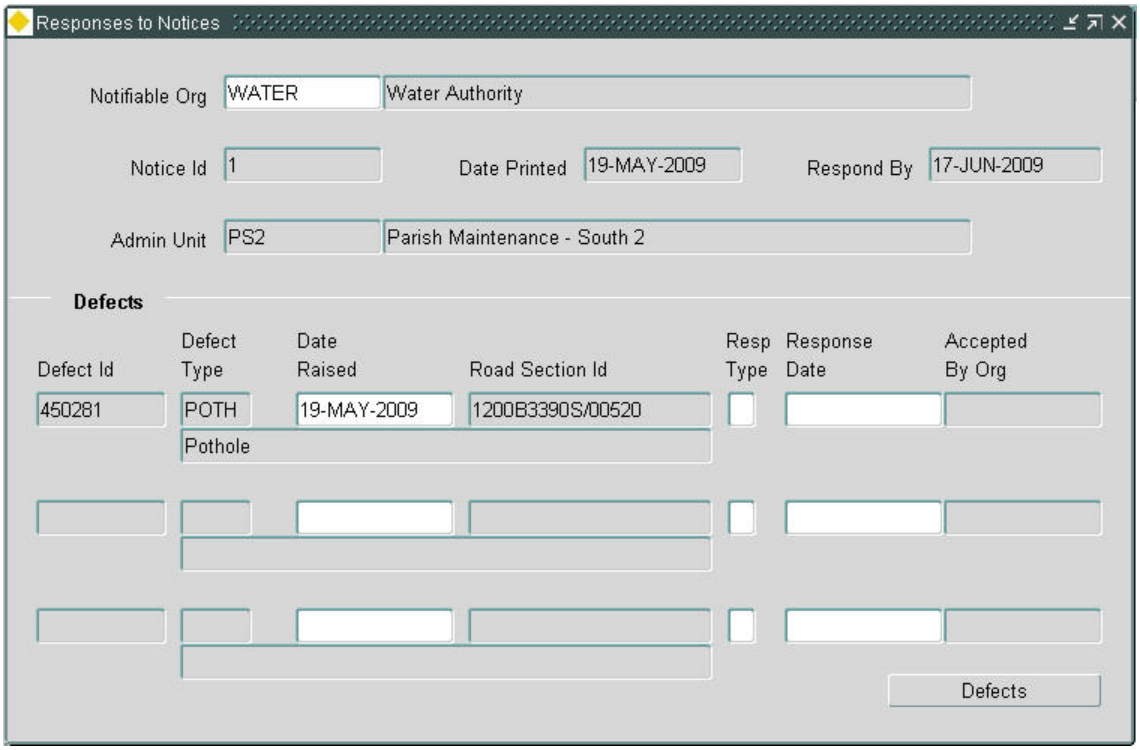

Figure 75 - Response to Notices

2.15.1 General Information

If, when carrying out an inspection, an inspector suspects a defect found is the responsibility of an external organisation, he will enter the details in the notify field in Inspections – MAI3808. A letter is then sent to the notifiable organisation stating that you believe the defect found is their responsibility.

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This form is provided to allow the responses to defect notifications to be registered as they are received from notifiable organisations

2.15.2 Notice

Notifiable defect notices are produced automatically in response to the Notify field being completed in Inspections – MAI3808.

Before the notice can be retrieved it has to be printed using Print Defect Notices – MAI3904.

Enter suitable criteria to restrict the display of notices to those with which you are concerned, then press [Execute Query] to retrieve those notices. The following fields are query only and can be used to retrieve notice details:

- Notifiable Org
- Notice Id
- Date Printed
- Respond By
- Admin Unit

2.15.3 Defects

All the defects associated with the selected notice will be displayed.

When a response is received from the notifiable organisation, enter the Response Type, Date of Response, and the Accepted fields to record the contents of the reply.

Selecting the Defects button will display the defects using Defects- MAI3806.

Defect Id ***(Display Only)***

The number of the defect. This number is allocated when the defect is first logged and cannot be changed. It serves to uniquely identify the defect.

Defect Type ***(Display Only)***

The code and description representing the standard defect type relating to this defect. This will have originally been decided by the inspector.

Date Raised ***(Display Only)***

The date the defect was originally recorded.

Road Section Id ***(Display Only)***

The road section number of the section in which the defect was found.

Resp Type ***(Optional)*** ***List***

Select a code representing the response of the notifiable organisation to the notice.

These values can be added to using Domains – HIG9120 and updating the RESPONSE_TYPES option.

Response Date ***(Required)***

Enter the date the response was received. For an Acceptance, this will default to today's date.

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Accepted By Org ***(Optional)***

Enter the Org Code of the organisation accepting responsibility for the defect.

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3 Work Order Management

This chapter describes the forms used to create, maintain and review the Works Orders for both defect clearance works orders and other works.

Cyclic maintenance works orders are covered in a later chapter of this manual.

- Works Orders (Defects) – MAI3800
- Works Order Authorisation – MAI3848
- Other Works – MAI3800
- Non Highways Related Works
- Work Orders (Contractor) – MAI3802
- Gang/Crew Allocation – MAI3805
- Cancel Work Orders – MAI3610
- Quality Inspection Results – MAI3820
- Maintain External Activities – MAI1280

The form descriptions provide you with detailed information about each Works Ordering form in highways by exor, including:

- an overall description of the form
- a detailed explanation of each field, including available features (such as List of Values), default values and other characteristics
- helpful information for using the form

The following list identifies some of the Works Orders reports. A complete list can be found in the Works Order Reports section of this manual:

- Print Work Orders (Detail) – MAI3500
- Print Work Orders (Summary) – MAI3505
- Print Work Orders (Strip Plan) – MAI5130

3.1 Prerequisites

Before considering Works Orders you should ensure that Budgets and Contract details have been entered successfully. (Maintenance Manager System Administration Manual)

Works orders can be created at any time once the highway road network is in place (Network Manager manual).

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3.2 Using Locator with Works Ordering (Defects)

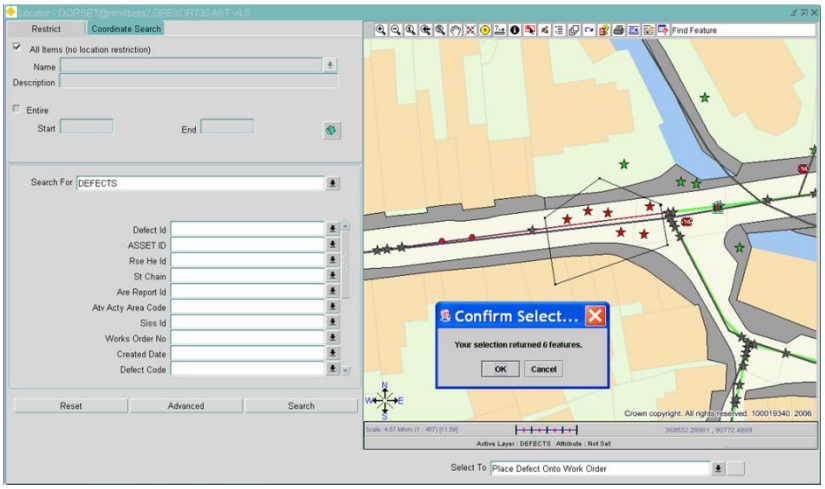

Figure 76 - Locator

3.2.1 General Information

Full information on the use of locator can be found in the Locator and Web mapping User Guide

In summary Locator – NM0572 provides Exor Users with an easy to use web based spatial interface that allows the raising of a work order on defects.

Work orders can be raised in two ways, these are:

- Create a work order directly after entering the defects via locator.
- Create a work order by selecting existing defects within locator.

Once the defects have been selected and the work order module is selected standard work order functionality is then available.

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3.3 Work Orders – MAI3800 – View through Locator

3.3.1 General Information

When a work order has been created and saved, the complete work order can be viewed through locator by selecting the [Show Map] button when in the work order screen as shown below:

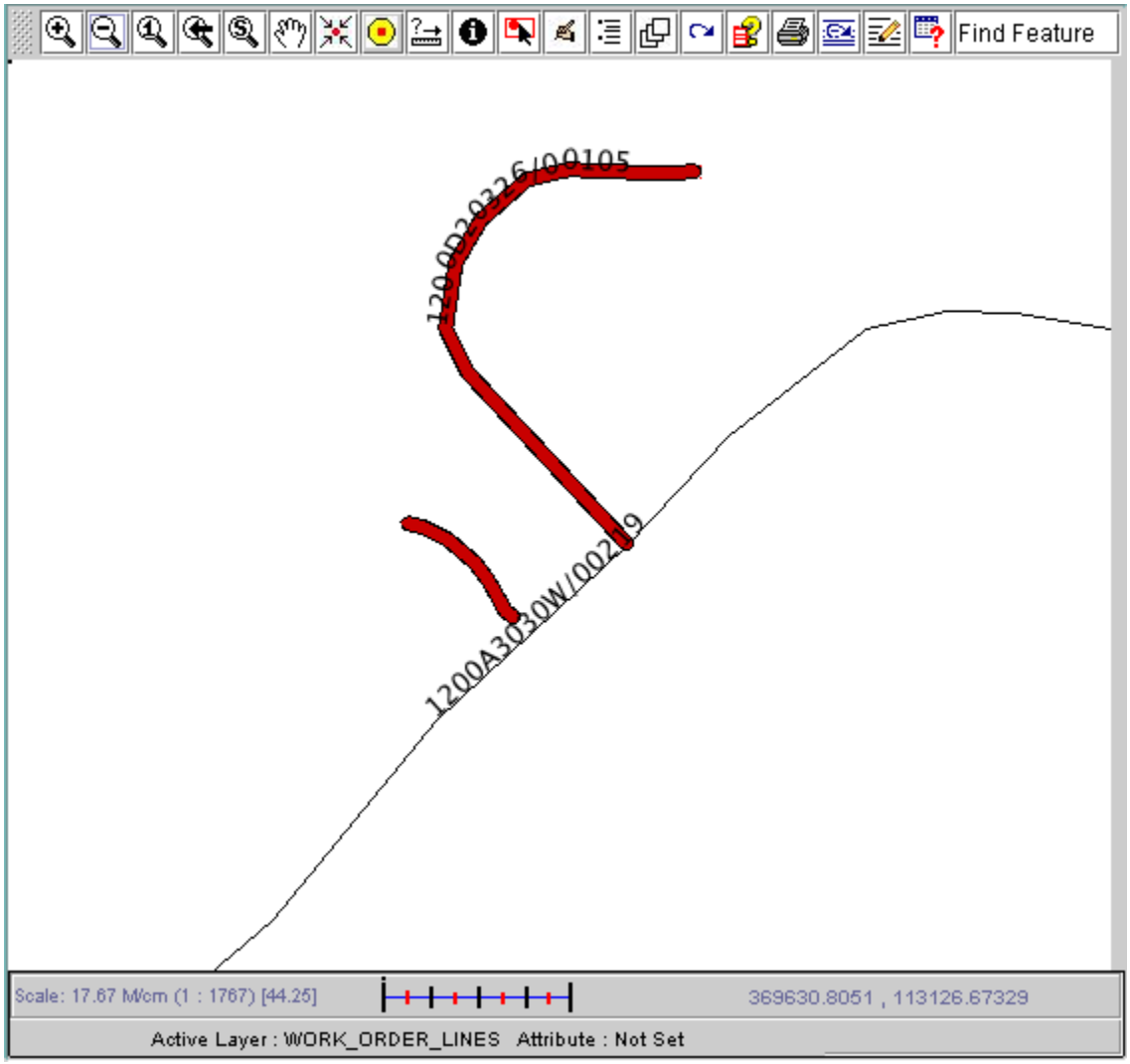
Find Feature
1200A3030W/00219
Scale: 17.67 M/cm (1 : 1767) [44.25]
369630.8051 , 113126.67329
Active Layer : WORK_ORDER_LINES Attribute : Not Set

Figure 77 – Locator – Show work order

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If the button is pressed from the Work Order Lines canvas then only then shape for the current Work Order Line will be highlighted in the Map.

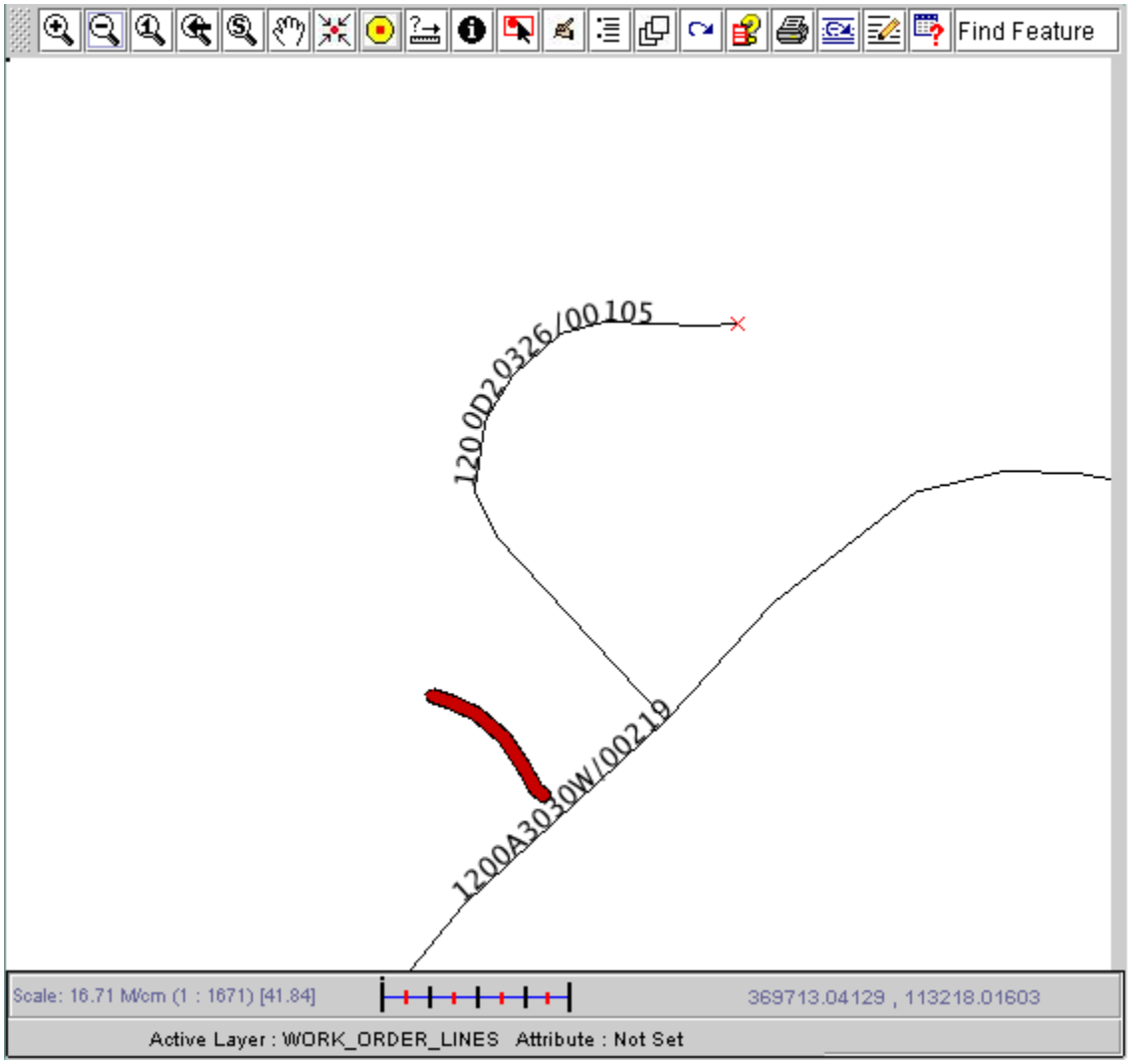

Figure 78 – Locator – Show work order line

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3.4 Work Orders – MAI3800 – Edit Default WOL Shape

3.4.1 General Information

When a work order line has been created against a work order the user is able to digitise a new location or shape that more accurately represents the work order line.

In order to edit the default shape of a Work Order Line the [Get From Map] button on the Work Order Line window should be used:

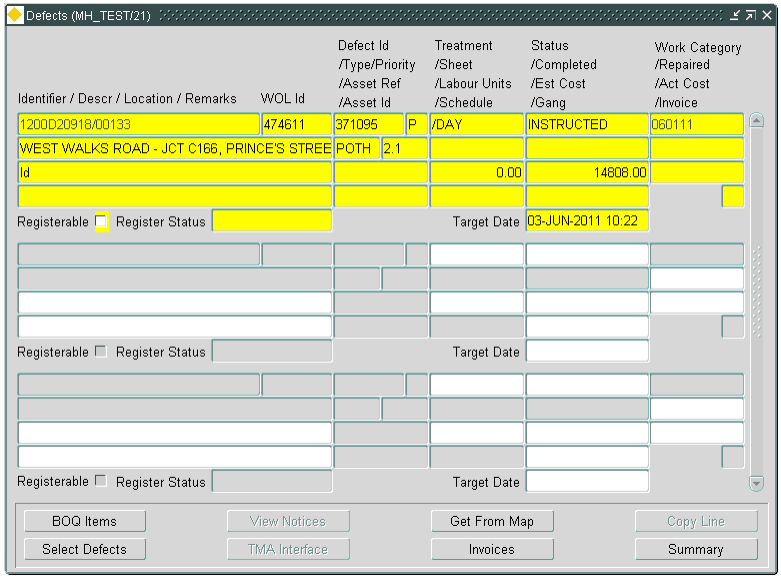

Figure 79 - Work Order Lines

The [Get from Map] button is only enabled when the Work Order Line is populated and is not COMPLETED.

Once the [Get From Map] button has been selected the form will search for themes where:-

- The theme is based on the Work Order Lines base theme.
- The theme has MAI3800 as a theme function.

If more than one theme is found the extended LOV will be displayed for the user to select the desired theme.

The form will then display a pop-up window prompting the User to select a Geometry type for the new Work Order Line shape.

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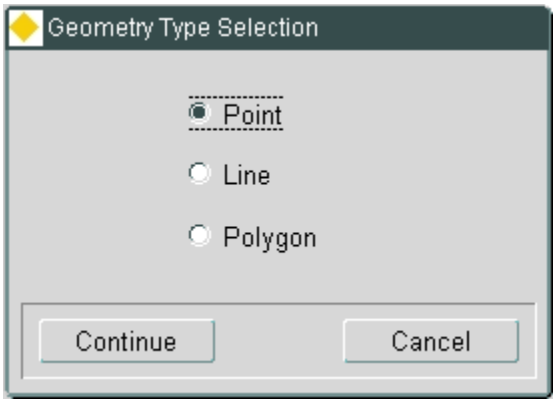

Figure 80 - Geometry Type Selection

Once a Geometry Type has been selected and the [Continue] button selected, Locator will be called in Multi Point mode with the map zoomed to the current Work Order Line shape.

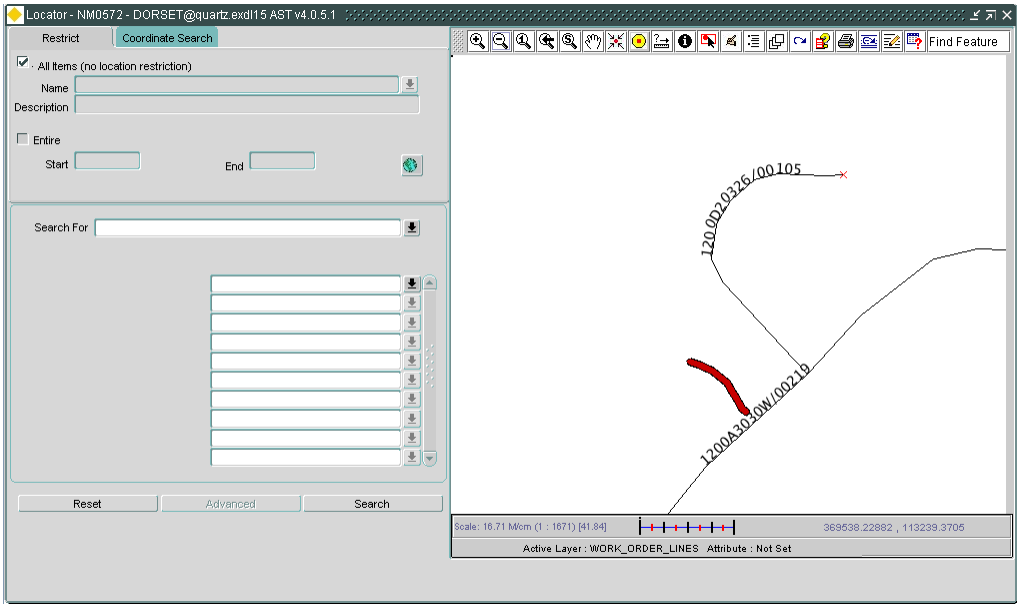

Figure 81 – Locator – Work order line selection

To define the new shape for the Work Order Line select “Send Multiple Points to application” from the “Feature Edit Menu” button in the Map as shown below.

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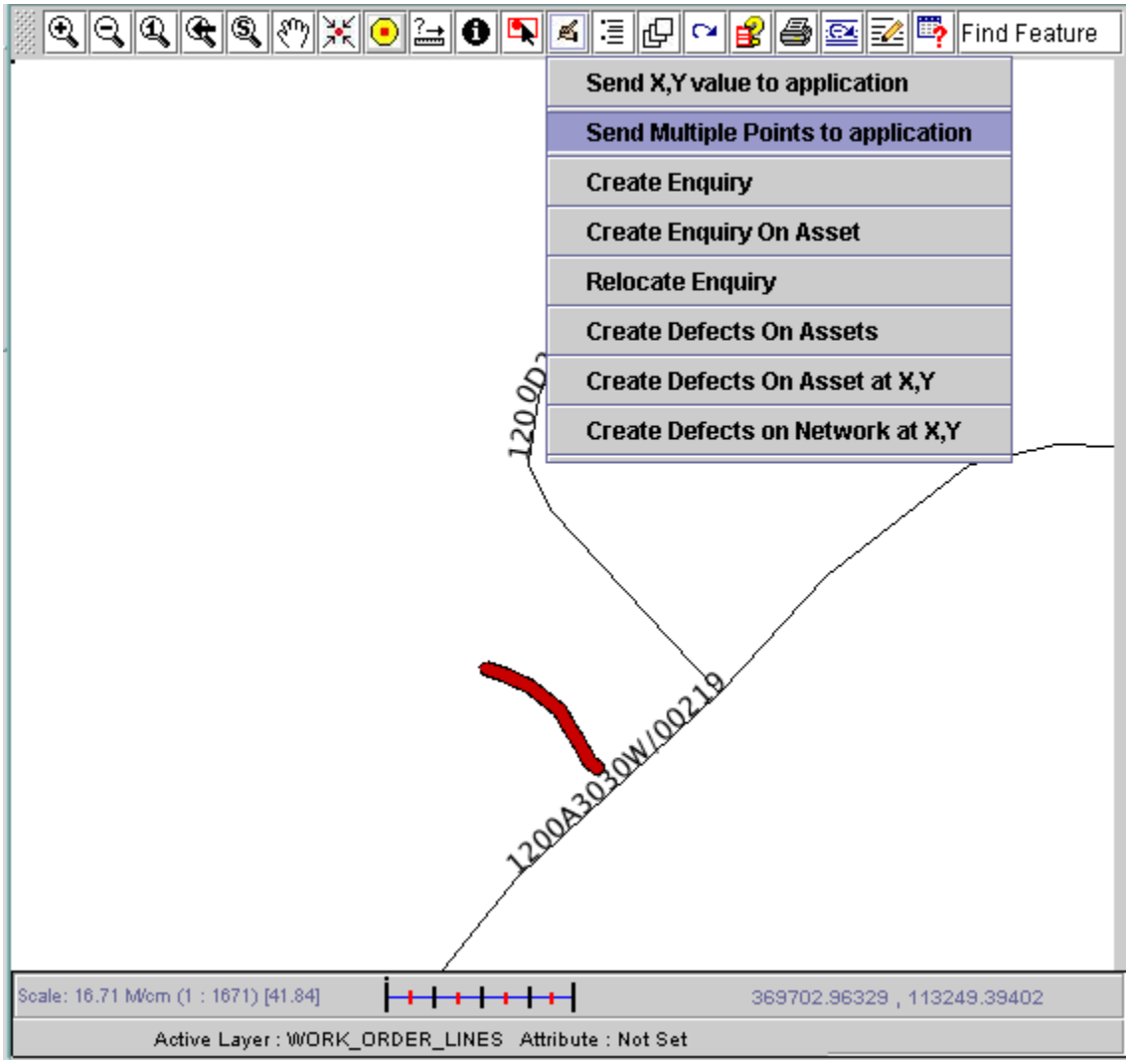
Find Feature
Send X,Y value to application
Send Multiple Points to application
Create Enquiry
Create Enquiry On Asset
Relocate Enquiry
Create Defects On Assets
Create Defects On Asset at X,Y
Create Defects on Network at X,Y
1200A3030W/00219
Scale: 16.71 M/cm (1 : 1671) [41.84]
369702.96329 , 113249.39402
Active Layer : WORK_ORDER_LINES Attribute : Not Set

Figure 82 – Locator – Re-define work order line shape

To return a point shape, just double click the Map at the desired point.

To return a Line or a Polygon click the required points on the map, then double click the last point to finish.

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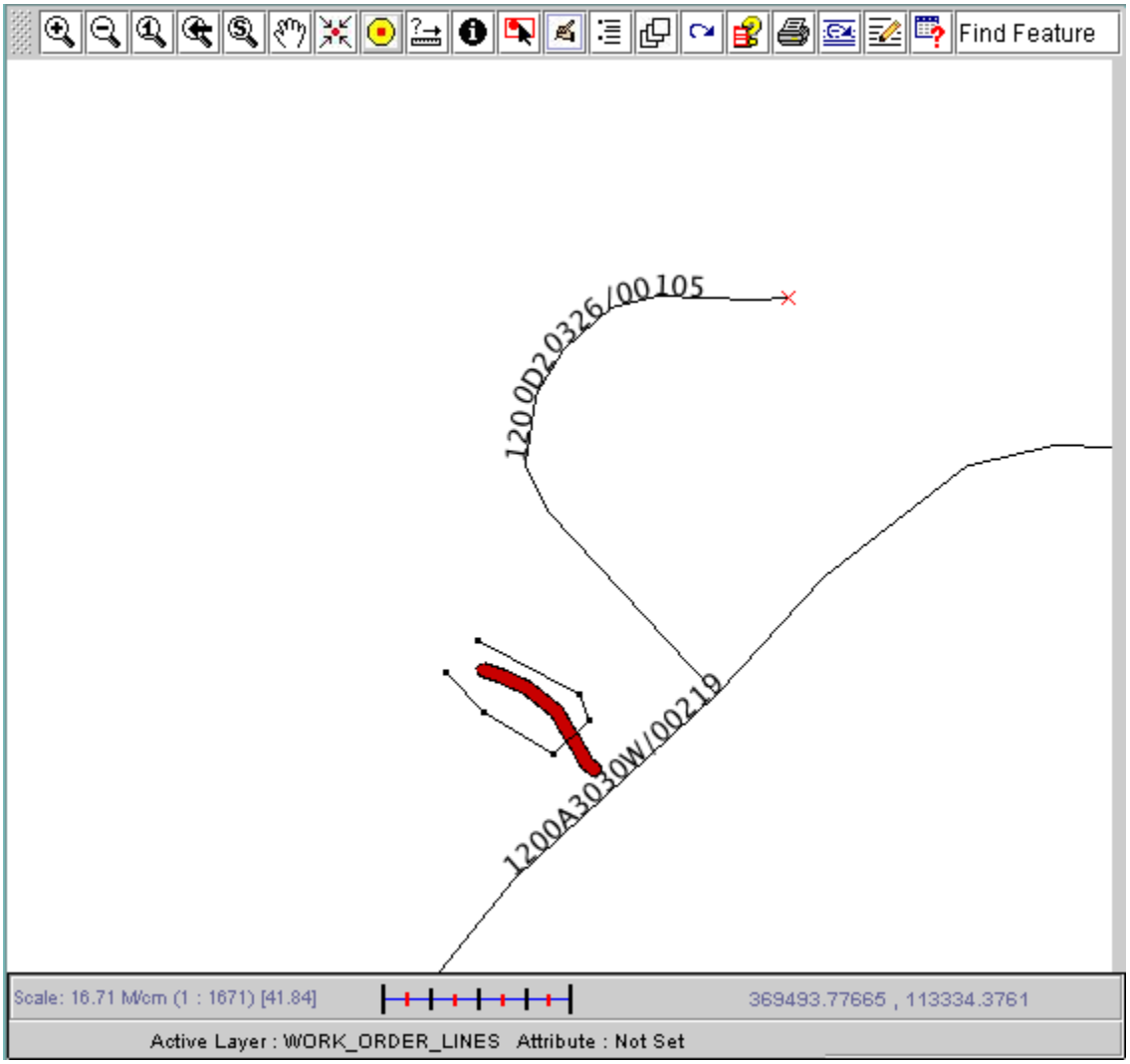
Find Feature
120 0D2 0326/00 105
1200A3030W/00219
Scale: 16.71 M/cm (1 : 1671) [41.84]
369493.77665 , 113334.3761
Active Layer : WORK_ORDER_LINES Attribute : Not Set

Figure 83 – Locator – Re-define work order line shape

Once a double-click is detected by the map the point(s) will be returned to MAI3800.

If the user has returned points that do not match the selected Geometry Type and error will be raised and the Work Order Line shape will not be updated, for example:

- If the user selected Point and returns more than one point from the map the following error will be raised.

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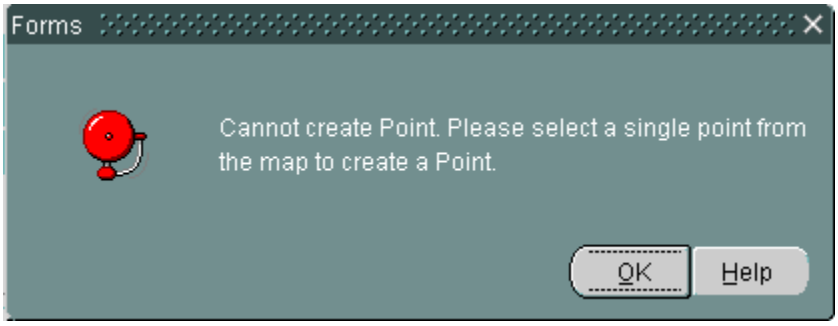

Figure 84 - Error Message

- If the user selects Line and only returns one point from the map the following error will be raised.

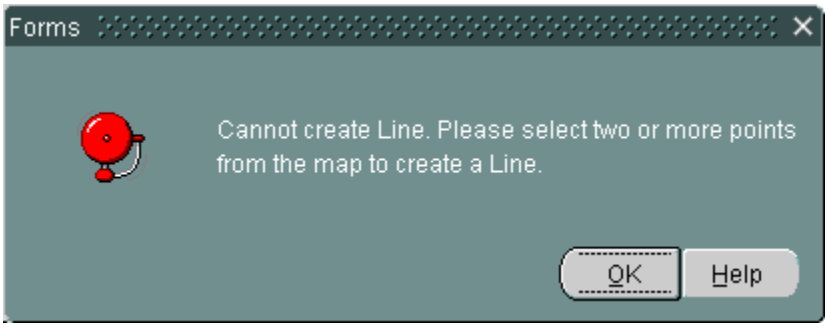

Figure 85 - Error Message

- If the User selects Polygon and returns less than 3 points from the map the following error will be raised.

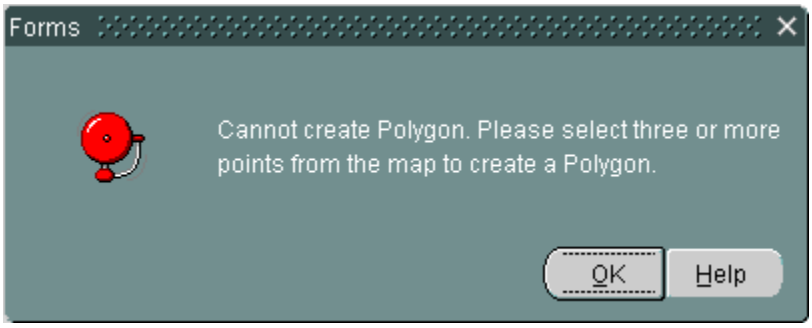

Figure 86 - Error Message

- Finally if the user selects Polygon and the points returned lead to a self intersecting Polygon, for example:-

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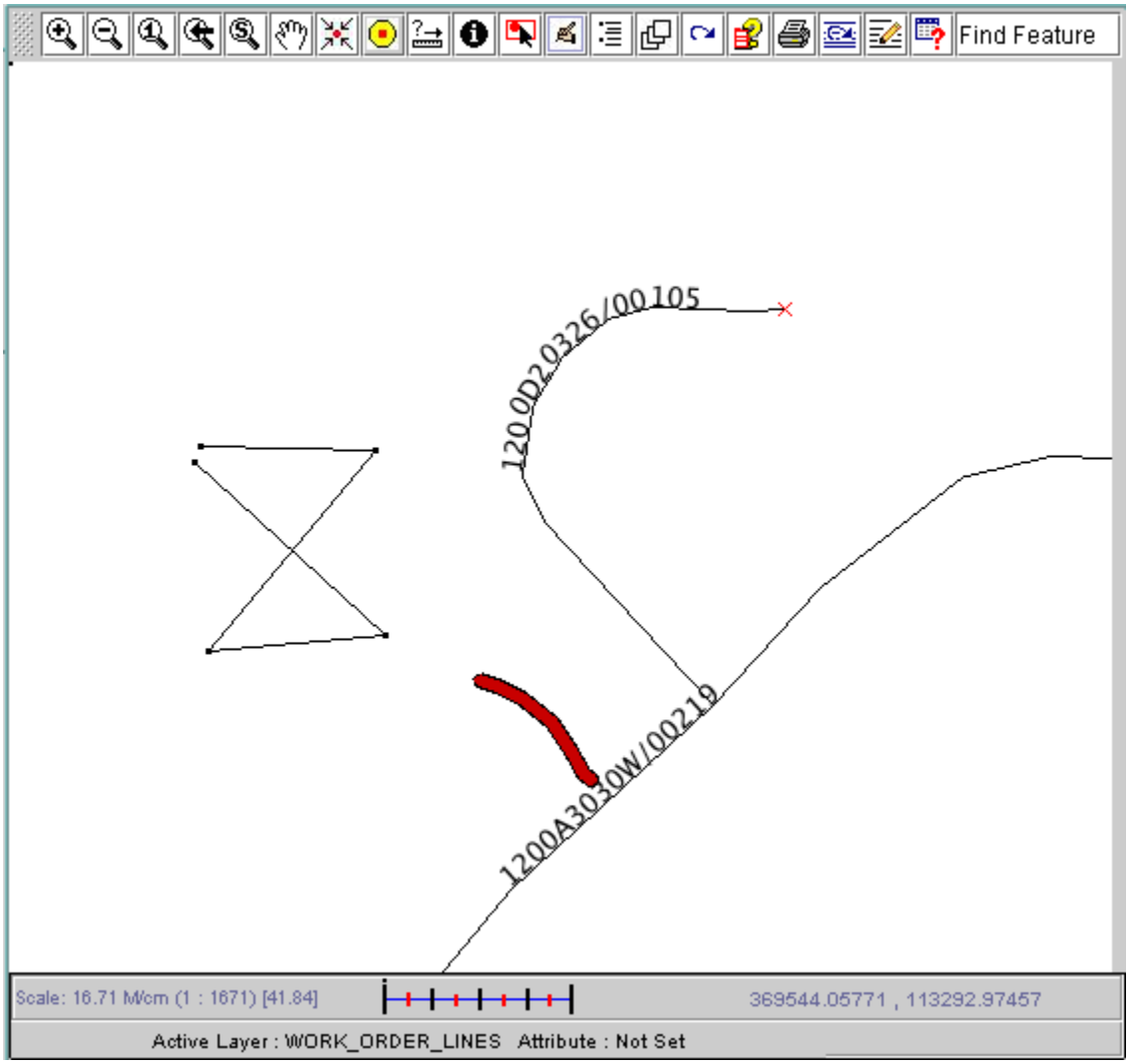

Figure 87 – Locator – Redefine shape polygon error

- Then the following error will be raised.

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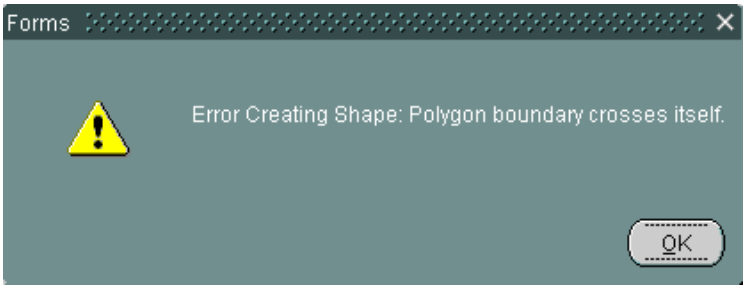

Figure 88 - Error Message

- If no errors are raised by the form then the new shape has been generated and updated in the shape table. However it has not yet been committed. To save the changes the user must select [Save]
- Once the change has been committed the new shape can viewed be by pressing the [Show Map] button .

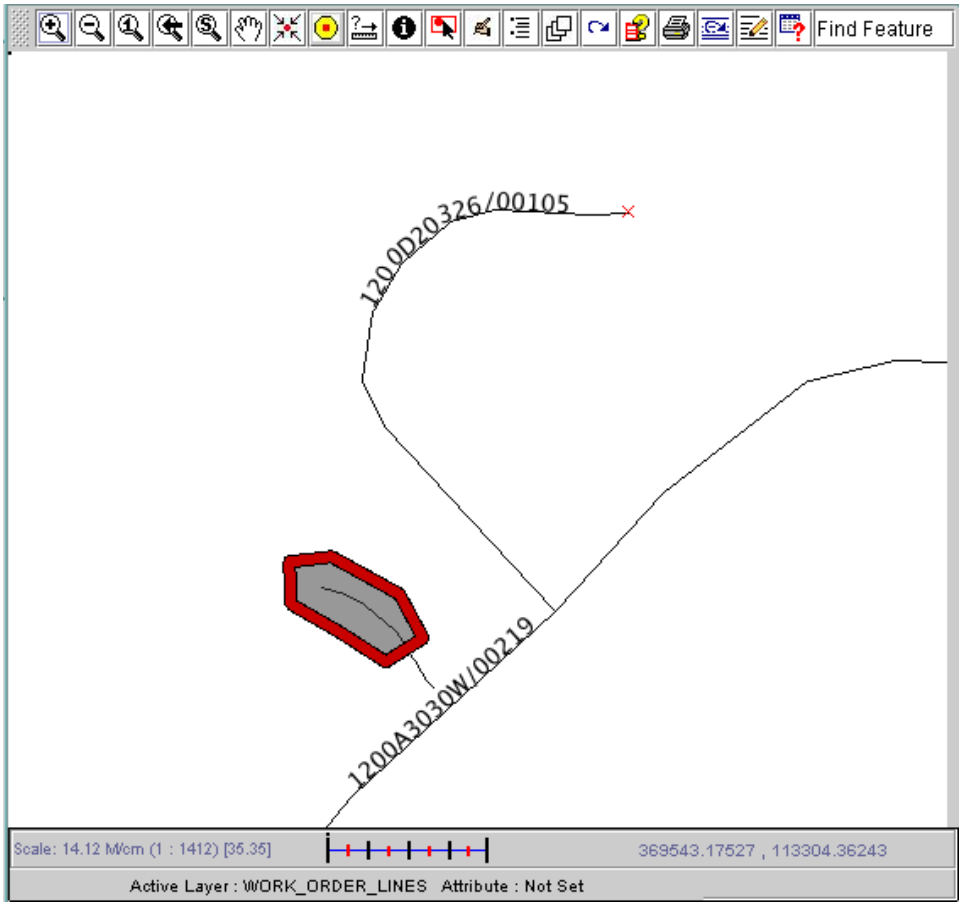

Figure 89 - Locator

Note: When the system has been unable to generate a default shape for the Work Order Line (for example the WOL is for a Group Of Groups) the [Get From Map] button will still work but will not zoom when initially called. It is up to the User to locate the area in which the work is to be carried out and then use "Send Multiple Points to application" from the "Feature Edit Menu" button to create a shape for the Work Order Line.

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3.5 Works Orders (Defects) – MAI3800

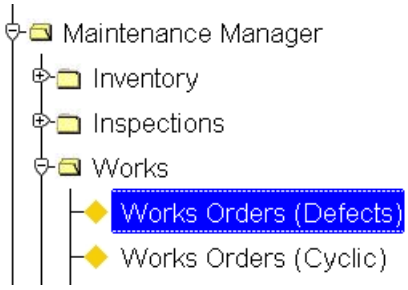

Figure 90 - Works Orders (Defects) Menu Option

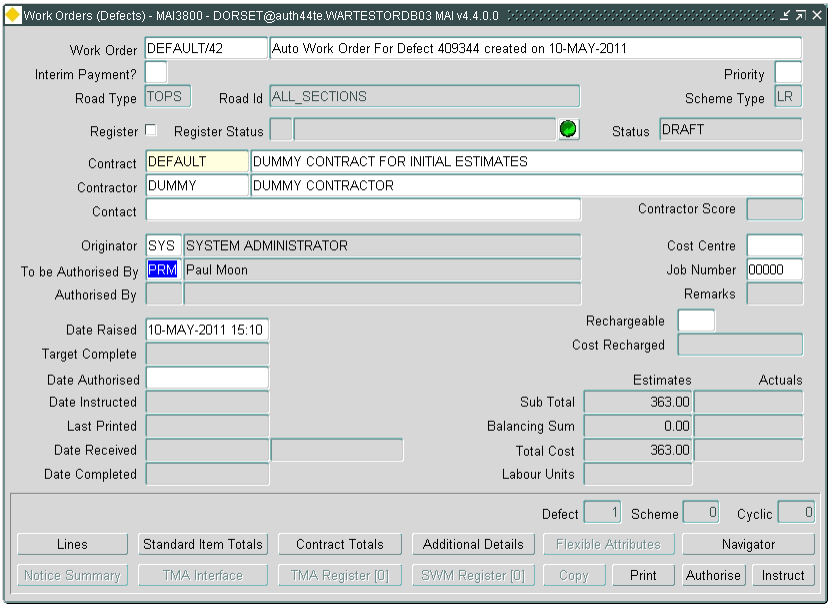

Figure 91 - Work Order (Defects)

3.5.1 General Information

When inspections are carried out on road sections, it is possible that defects may be found on the inventory items being inspected. These defects are recorded in the system along with the inspectors recommended actions. For these actions to be carried out, a works order must be raised.

When creating a defects works order, you can select a defect or defects to be rectified and view the inspector's original schedule items required to rectify the defect. At this point you can amend these schedule items, adding new ones or removing existing items. As this process is carried out, the various totals and sub-totals contained on the works order are updated instantly.

The Work Orders (Defects) form offers you the facility to carry out 'what if' planning by constructing your works order, gradually adding and removing Works Order lines and Schedule Items until the totals match your budget before confirming the Works Order and forwarding it to the contractor. Works Orders must be raised within the limits imposed for the selected Budget i.e. once the Allocated Amount for a budget is reached, no further Works Order Lines may be

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raised against it. In some circumstances a User may need to raise Works Orders which would exceed the Allocated amount for a Budget. This can be done by granting the role OVER_BUDGET to the User requiring to exceed the Budgetary limit.

Works Order lines that have no defects associated with them can also be added to a defect clearance works order, this is covered in raising Works orders for Other Works, below.

Once a Works Order has been instructed, further Defects or Works Order lines that have no associated Defects may not be added to the Works Order unless Product Option ADDINSTR is set to 'Y'. Defects can however be removed from the Works Order any time before the order is completed.

Once a Works Order has been printed using Print BOQ Work Order – MAI3906, further Defects or Works Order lines that have no associated Defects may not be added to the Works Order unless Product Option ADDPRINT is set to 'Y'.

Changes made to a Works Order, its associated Work Order lines or Bill of Quantity Items may be viewed using the Audit facility within a Works Order. The Audit window may be called by pressing the [Expand] button on the main Works Ordering form.

It is possible to define what items in a Works Order are to be Audited by selecting the required fields using form Works Order Audit Maintenance – MAI3803.

The size of the Audit log trail can be restricted by setting Product Option AUDIT_ALL to 'N'. If this option is set to 'N', only the initial and final values of a field are recorded in the Audit trail, per session per User and any intermediate changes are not logged.

If Product Option AUDIT_ALL is set to 'Y' then all interim (changes between saving) changes to the selected fields are logged. It should be noted that for some Works Orders, the audit trail could be very large if this option is set to 'Y'.

3.5.2 Work Order

When you enter this window, the cursor sits in the Work Order description field waiting for you to enter a new works order. If you wish to retrieve an existing works order, press [Enter Query], enter your selection criteria, then press [Execute Query] to retrieve the works order.

Whilst in this window, you can view the Work Order Audit details by pressing the [Expand] button in the toolbar at any time.

Work Order ***List***

The method of works order number generation is set up in Product Options – HIG9130, setting the WORREFGEN option. There are three methods of generating the works order number.

1. Manually entered by the user, the system will check the number is unique.
2. Contract Based, the contract name will prefix a unique number
3. Admin unit based, the admin unit number for the selected contract will prefix a unique number.

A list of existing works orders is only available in query mode.

When creating new Works Orders enter a description of the order in the adjacent field.

Interim Payment? ***(Optional)***

Enter 'Y' to signify that the Works Order will be subject to Interim Payments on Part Completed Works Order lines. This may be entered at any time during the life of the Works Order.

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Priority ***(Optional)*** ***List***

Enter a Priority for the Works Order. These will have been previously set up using Work Order Priorities – MAI0312 In addition the contents of the WOR_PRIORITY list of values, maintained using Domains – HIG9120, will be concatenated onto the list, this is to cater for backward compatibility. This will automatically populate the Target Date field below.

Road Type ***(Required)*** ***List***

Select the road type for the works order.

If budgets are to be used the road type must match the road types set in the Product Options – HIG9130, for DoT roads – BUDGRPTYPD, for Local roads – BUDGRPTYPL.

Road Id ***(Required)*** ***List***

When <List> is selected only groups of the type entered in the previous field will be displayed, make your selection from this list without drilling down through the gazetteer.

Scheme Type ***(Required, Default)*** ***List***

Select the scheme type under which this work will be carried out.

Some restrictions will apply based on the values set using Item Code Breakdowns , they are as follows:

- The options available on the list will be restricted to whether the road selected is DoT or Locally owned.
- The scheme type selected will restrict the work categories available when raising the order.
- The scheme type cannot be changed if works order lines are present on the works order.
- The product option DEFSCHTYPU must be set to 'Y' if the user is allowed to update the default scheme type.
- The scheme type will affect the flexible attributed returned when the [Flexible Attributes] button is selected. The flexible attributes for each scheme type are defined by the System Administrator using Application Attributes – MAI3819.

Register ***(Optional)*** ***Checkbox***

If all the contents of this works order are to be notified to street works this check box will need to be checked. Once checked the Register Status field will become populated and the [TMA Interface] button will become active. Any work order lines subsequently added to the work order will have to be ticked manually. If unchecked, all work order lines that have not had a notice generated will be deselected.

Register Status ***(Display Only)***

This field will display the current register status of the works order lines.

Current statuses are:

- N – Nothing to Register – One or more works order lines have been ticked as Registerable but no notices have been sent for any of them.
- O – Outstanding – one or more of the works order lines have been ticked as Registerable and at least one notice has been sent for at least one of them. Only work order lines that have a status of INSTRUCTED can be sent to the register.
- C – Complete – All work order lines that have been ticked as Registerable have had a '0600' notice sent. At this point the [View Register] button will be displayed.

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The Refresh button will refresh the status in the active form. The status will be automatically refreshed when the work order is re-queried.

Status ***(Display Only)***

This field will display a status code derived from the various status codes of the work order lines to indicate the overall status of the work order.

Status codes can be viewed in form Status Codes – HIG9110. Work Order Status codes control the work ordering processes and should not be added to or modified without direct consultation with exor.

Contract ***(Required)*** ***List***

Select a valid contract under which this work will be carried out. Contracts are set up using Contracts – MAI3880. Only Contracts with a status of ACTIVE will be displayed.

If you have set up a dummy contract using Product Options – HIG9130 and setting the DUMCONCODE option, this contract can be selected, this will allow you to fully define the work order before assigning it to a contract. Once you have specified the relevant Bill of Quantity items for this work order, press the [Contract Totals] button to view a list of suitable contracts.

If product Option WORREFGEN is set to either 'C' for 'Contract Based' Works Order Reference Number generation or 'A' for Administration Unit Works Order Reference Number Generation and the initial Contract selected is changed, the Works Order will be Cancelled and an exact copy made with the new reference number being generated. The original Works Order will have '**Cancelled**' appended to the start of it's description.

Contractor ***(Display Only)***

The code and name for the contractor will be displayed. This is obtained from the contract details.

Contact (Optional)

Enter a contact name if required.

Contractor Score ***(Optional)***

If required, enter a score to represent the performance of the contractor in fulfilling this works order. This can only be entered when the works order is complete.

Originator ***(Required, Default)*** ***List***

Select a valid person ID to represent the originator of the work order. Default is the current user.

To be Authorised By ***(Optional)*** ***List***

When creating a work order the user may nominate another user who should authorise the current work order.

This field will only accept the initials of a user that can view and authorize a work order, this picklist will be populated with those users that have been given the permission to authorise a work order by the System Administrator using Maintenance Manager User Data – MAI4410.

Population of this field does not restrict this work order to be authorised by the selected user, it may be authorised by any user that has the permission to authorise a work order.

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Authorised By ***(Display Only)***

This field is populated in one of a number of ways:

1. A user with the appropriate permission selects the [Authorise] button.
2. A user with the appropriate permission selects the [Instruct] button, this will authorise the work order as well as instructing it.
3. Using Authorise Works Orders – MAI3848.
4. Using the work order Authorisation Worktray.

Product Option AUTH_OWN must be set to 'Y' in order for the same person to both Raise and Authorise a Works Order. To Authorise a Works Order its total estimated cost must be within the range defined for the User in Users – HIG1832. If the User has no limits set, they may authorise any value of Works Order.

This field will be null on old work orders as the Authoriser was not recorded then.

Cost Centre ***(Optional)*** ***List***

These codes are maintained using Cost Centre Codes

Job Number ***(Required, Default)*** ***List***

If required, enter the job number for this works order. This field defaults to 00000.

Remarks ***(Optional)*** ***Edit***

If required, enter any additional remarks relating to the completed works order. This can only be entered when the works order is complete.

Date Raised ***(Required, Default)***

Enter the date upon which the works order was raised. This field defaults to the current date. An earlier date may be entered for retrospective works orders.

Target Complete ***(Optional)***

This is the overall target date for all the works contained within the work order.

This may be populated in one of two ways:

1. Automatically populated based on the Date Raised and the Work Order Priority.
2. The latest Target date of all the associated work order lines on the work order.

Note: This date will be overridden if work order lines are subsequently added that have a later Target Date.

Note: If the product option UPDWOTGT is set to 'Y' the date is to be updated manually ignoring any dates that are automatically populated.

Date Authorised ***(Optional)***

This is populated with the system date/time when the Works Order is Authorised via

- The Works Order form – MAI3800, [Authorise] or [Instruct] button
- The Work Orders Authorisation form – MAI3848
- The Works Order Work Tray

When this field is populated following the selection of the [Authorise] button a pop up window will be displayed allowing the user to enter a date before the sysdate enabling the authorisation of a retrospective work order.

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When this field is populated following the selection of the [Instruct] button the date will be the same date as the instructed date, this also allows the user to enter a date prior to the sysdate for the creation of retrospective work orders.

Note: When the User attempts to Authorise a Works Order this date field is used to determine the total value of Works Orders already Authorised by the User on the same day.

Note: If the value of the current Works Order would lead to the User's Daily Authorisation Limit (see the "Max value per Day" field in Maintenance Manager User Data – MAI4410) being exceeded an error will be displayed and the current Works Order will not be Authorised

Date Instructed *(Optional)*

When the works order has been completely defined and you are ready to issue it to the contractor, set the Date Instructed to the current date by pressing the [Instruct] button on the form. When the Work Order is instructed this button will be used to [Complete] a Works Order. When building the works order, leave this field blank.

All works order lines must be priced before the order can be instructed.

When the [Instruct] button is selected the following pop up window is displayed allowing the user to enter a date that is prior to the sysdate enabling the creation of retrospective work orders.

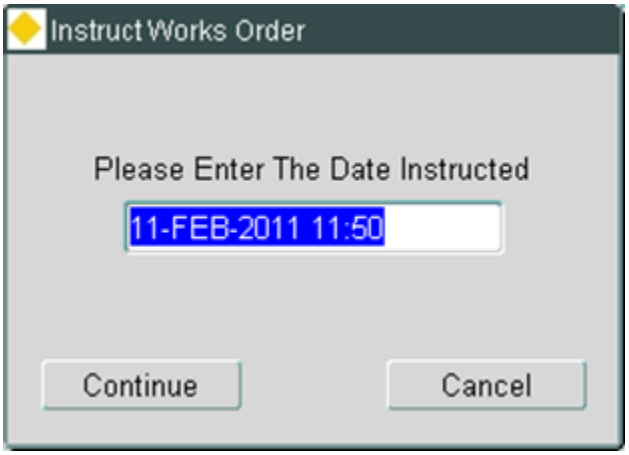

Figure 92 - Instruct pop up

[Continue] will Instruct the work order at the displayed date and time.

[Cancel] will return the user to the Work Order details with no changes made.

A works order must have a date instructed if the contractor is to view the order using Works Orders – Contractor Interface – MAI3802 and for the work order to be picked up by the CIM interface.

Last Printed *(Display Only)*

When the works order is printed, the date of printing is displayed here. If the works order is reprinted at any time, this field is updated to reflect the last printing date. This field is part of the works ordering audit trail so each time it is printed an audit is maintained.

Once a works order has been printed changes to the works order lines are not allowed unless the Product Option ADDPRINT is set to 'Y'.

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Date Received ***(Display Only)***

When a contractor accesses the works order using Works Orders – Contractor Interface – MAI3802 this date will be populated, the id of the user who viewed the work order displayed in the adjacent field.

Date Completed ***(Display Only)***

When all of the lines on the works order are completed, this field will display the date of completion. Once the works order is completed and saved, no further changes can be made to the works order.

To complete a works order without completing each individual line select the [Complete] button. This will set all the BOQ Actual values equal to the current estimated values.

To complete a works order by completing each line individually, the User can change the individual line to completed manually and enter a date in the next field. At this point changes can be made to the actual values of the BOQ items, these changes must be made before saving the changes.

Rechargeable ***(Optional)***

Enter either 'Y' or 'N' to indicate if some or all or this work order is rechargeable.

Cost Recharged ***(Optional)***

When a rechargeable defect has been rectified and the works order completed, it is possible to recharge an amount of money to the contractor. If required, enter that amount here.

Estimates, Sub Total ***(Display Only)***

As the works order is being compiled, each works order line is costed up based on the current rates for the job items held against the contract. This figure does not take into account any discount arrangements in place with the contractor.

Estimates, Balancing Sum ***(Display Only)***

If the contractor to which this works order has been assigned uses Discount Groups, then a percentage discount is applied to the total estimated works order cost. The pre-discount total is displayed in the Sub-Total field above. The balancing sum field contains the calculated value of the discount.

Estimates, Total Cost ***(Display Only)***

This field contains the sum of the Estimated Sub-Total and Estimated Balancing Sum fields above. If the contractor has no discount groups in place, then the Sub-Total and Total Cost fields will be the same. If a discount group structure is in place, then this field will show the works order cost after the discount has been applied.

Estimates, Labour Units ***(Display Only)***

If labour units have been entered in Standard Items – MAI3888 the total labour requirements for carrying out the work will be displayed here.

Actuals, Sub Total ***(Display Only)***

As the works order is being completed, the actual works order line values are accumulated into this field. This figure does not take into account any discount arrangements in place with the contractor.

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Actuals, Balancing Sum *(Display Only)*

If the contractor to which this works order has been assigned uses Discount Groups, then a percentage discount is applied to the total actual works order cost as displayed in the field above. The pre-discount total is displayed in the Sub-Total field above. The balancing sum field contains the calculated value of the discount.

Actuals, Total Cost *(Display Only)*

This field contains the sum of the Actual Sub-Total and Actual Balancing Sum fields above. If the contractor has no discount groups in place, then the Sub-Total and Total Cost fields will be the same. If a discount group structure is in place, then this field will show the works order cost after the discount has been applied.

Figure 93 - Work Order Content Summary

These three fields are displayed at the bottom of the main works order window and indicate the number and type of work order lines that are contained within the work order.

A number of buttons have been defined on this window for use when raising a works order, they are as follows:

[Lines] Opens the defects window and allows the user to add works order lines. This window is also common to both other works and cyclic maintenance works orders (Figure 96).

[Standard Item Totals] Opens the standard item totals window and displays the estimated and actual costs and quantities for each standard item in the works order. (Figure 106)

[Contract Totals] Opens the contract totals window and displays all contracts that can fulfill the work contained on the works order with associated costs and scores. (Figure 107)An alternative contract can now be selected if required.

[Additional Details] Opens the additional details window, additional additional details can be added if required. (Figure 111)

[Flexible Attributes] Opens the maintain flexible attributes window, attribute values can be added if required. (Figure 110)

[Navigator] Opens Navigator which allows the user to view and retrieve data associated a work order, an example of this is shown below: Details on the use of navigator can be found in the Query Builder and Navigator User Manual.

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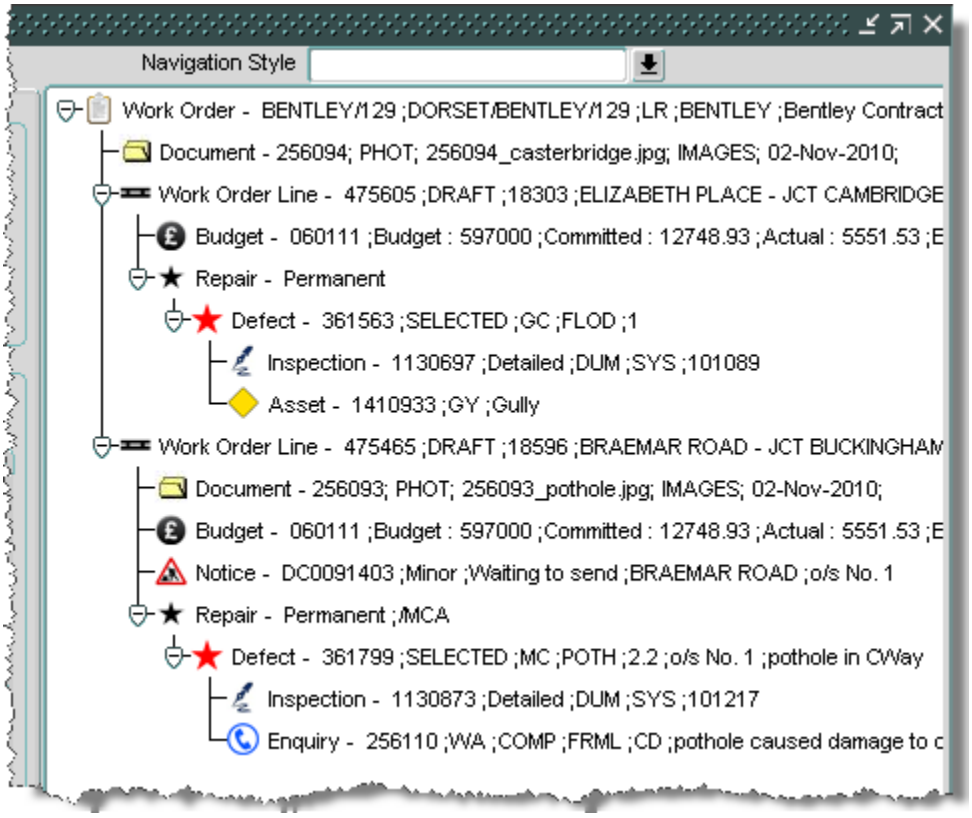
Navigation Style
Work Order - BENTLEY/129 ;DORSET/BENTLEY/129 ;LR ;BENTLEY ;Bentley Contract
Document - 256094; PHOT; 256094_casterbridge.jpg; IMAGES; 02-Nov-2010;
Work Order Line - 475605 ;DRAFT ;18303 ;ELIZABETH PLACE - JCT CAMBRIDGE
Budget - 060111 ;Budget : 597000 ;Committed : 12748.93 ;Actual : 5551.53 ;E
Repair - Permanent
Defect - 361563 ;SELECTED ;GC ;FLOD ;1
Inspection - 1130697 ;Detailed ;DUM ;SYS ;101089
Asset - 1410933 ;GY ;Gully
Work Order Line - 475465 ;DRAFT ;18596 ;BRAEMAR ROAD - JCT BUCKINGHAM
Document - 256093; PHOT; 256093_pothole.jpg; IMAGES; 02-Nov-2010;
Budget - 060111 ;Budget : 597000 ;Committed : 12748.93 ;Actual : 5551.53 ;E
Notice - DC0091403 ;Minor ;Waiting to send ;BRAEMAR ROAD ;o/s No. 1
Repair - Permanent ;MCA
Defect - 361799 ;SELECTED ;MC ;POTH ;2.2 ;o/s No. 1 ;pothole in CWay
Inspection - 1130873 ;Detailed ;DUM ;SYS ;101217
Enquiry - 256110 ;WA ;COMP ;FRML ;CD ;pothole caused damage to c

Figure 94 - Navigator window

[Notice Summary] This button is enabled if the TMA product is licensed and one or more notices have been sent for the work order. The Work Order TMA Interface – TMA3990 will be called and opened at the 'Work Order Lines' tab.

[TMA Interface] This button is enabled if the TMA product is licensed and one or more work order lines are ticked as 'Registerable'. The Work Order TMA Interface – TMA3990 will be called and opened at the 'TMA Noticing' tab.

[TMA Register] This button is enabled if the TMA product is licensed and one or more notices have been sent for the work order. The Works – TMA1000 will be called which will display the TMA Works that have been created for the work order.

[SWM Register] The SWM works entries in the street works register can be viewed using this button (Figure 130).

[Copy] This will copy the entire work order including all work order lines and associated BOQ items, the following pop up window will be displayed allowing the user to copy the BOQ items and their associated estimated quantities or copy the BOQ items only without the estimated quantities.

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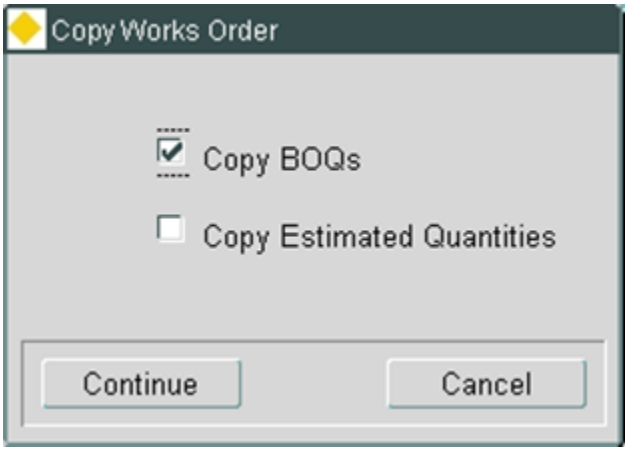

Figure 95 - Copy Works Order popup

[Continue] will create new copy of the Work Order or Work Order Line.

[Cancel] will return the user to the Work Order details with no changes made.

[Copy] is only available on a scheme type work order. If a copy is carried out on a work order that has combined defect and scheme lines only the scheme portion of the order is copied

A work order can be copied at any stage of its life cycle, the copied work order will be un-instructed awaiting modification.

The copy work order will have a new number in line with the work order numbering convention the description of the new work order will contain the number of the original order with the word 'COPY' appended.

[Print] Prints the instructed works order, the format of the printout is set up in Product Options – HIG9130 and setting the WORREPMOD option to the required works ordering report.

Once a works order has been printed changes to the works order lines are not allowed unless the Product Option ADDPRINT is set to 'Y'

[Authorise] Sets the Date Authorised to today's date and time (sysdate). When this button is selected a pop up window is displayed allowing the user to enter a date that is prior to the sysdate enabling the creation of retrospective work orders.

Note: A user will only be able to authorise a work order if they have been given the appropriate permission by the system administrator using Maintenance Manager User Data – MAI4410.

When the User attempts to Authorise a Works Order the Date Authorised field is used to determine the total value of Works Orders already Authorised by the User on the same day.

If the value of the current Works Order would lead to the User's Daily Authorisation Limit (see the "Max value per Day" field in Maintenance Manager User Data – MAI4410) being exceeded an error will be displayed and the current Works Order will not be Authorised

[Instruct] When this button is selected a pop up window is displayed containing the current date and time (sysdate), this allows the user to enter a date that is prior to the sysdate enabling the creation of retrospective work orders.

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If the work order has not been authorised this will also authorise the work order provided the user has the appropriate permissions (see the [Authorise] button for details).

Once the 'Date Instructed' has been saved, the button will change to read [Complete].

Work order lines can be added to an instructed works order if the Product Option ADDINSTR is set to 'Y'.

[Complete] Completes all works order lines, once this button has been selected and the date entered, no changes can be made to the works order.

To make changes to the actual BOQ values, Works Order lines should be completed individually using the following process:

1. Change the work order line status code to COMPLETE.
2. Update all the BOQ items for the work order lines to reflect the actual values
3. Save the changes.

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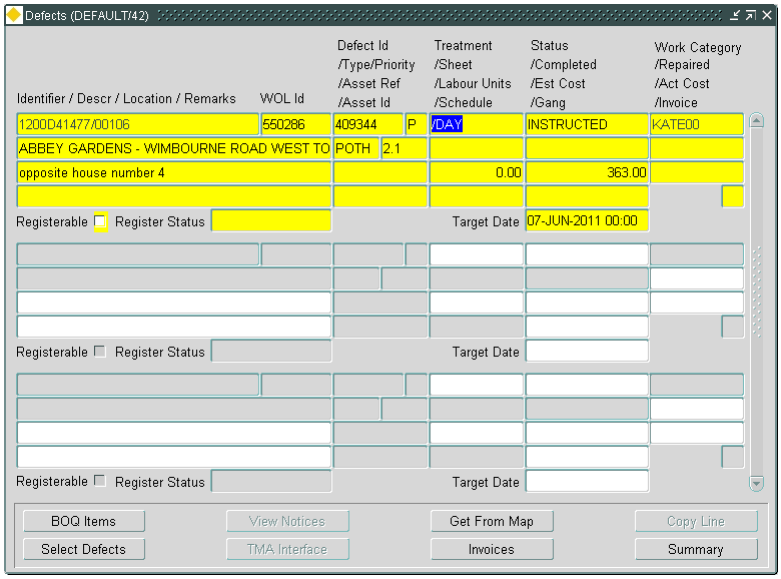

Figure 96 - Work Order Lines

3.5.3 Work Order Lines

This window is displayed when the [Lines] button is selected in the Works Orders Defects window.

It holds details of each of the defects selected for inclusion on the works order. Each of these defects is known as a 'Work Order Line'. In addition to the defects the work order line may contain 'small scheme' works, this is works defined on the network but does not have any associated defects.

Work orders can contain a combination of defect and non defect work order lines as required.

Initially all the lines will be blank, defects are added to this window by selecting the [Select Defects] button and entering the required selection criteria.

This window contains a line for each defect found. If you want to remove a defect from the works order, position the cursor on the appropriate line and press the [Delete Record] button in the toolbar. The defect will then be removed from the works order and returned to the 'pool' of outstanding defects.

Should you want to add further defects, select the [Select Defects] button again. This will return you to the Selection Criteria window where you can initiate a further search to recover additional defects. This search will not find the defects currently on the works order, but if a defect has been removed from the works order as described above, the search will recover that defect again.

Whilst in this window, you can view full details of a defect by pressing the [Expand] button in the toolbar at any time.

Once a Works Order has been instructed, further Defects or Works Order lines that have no associated Defects may not be added to the Works Order unless Product Option ADDINSTR is set to 'Y'. Defects can however be removed from the Works Order any time before the order is completed.

Once a Works Order has been printed using Print BOQ Work Order – MAI3906, further Defects or Works Order lines that have no associated Defects may not be added to the Works Order unless Product Option ADDPRINT is set to 'Y'.

Each works order line displays a summary of the defect information, the following field descriptions apply to defect clearance works orders only.

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Identifier ***(Display Only)***

Displays the road Id where this works is located.

Descr ***(Display Only)***

Displays the full name of the road section.

Location ***(Optional)***

Displays the text describing the location of the current defect. If required this field may be entered for the selected work order line, this will not affect the defect record but may be of use for small scheme work orders and if the work order line is to have a notice created against it.

Remarks ***(Optional)***

Add additional text as required, access to this field is restricted to those work order lines with a status of INSTRUCTED. When a work order line has been copied some text to that affect will be placed in this field.

WOL Id ***(Display Only)***

Displays the work order lines internal Id number.

Defect Id ***(Display Only)***

Displays the unique defect reference number for the current defect.

Defect Type ***(Display Only)***

Displays the code representing the type of defect.

Defect Priority ***(Display Only)***

Displays the priority code for the current defect.

Asset Ref ***(Display Only)***

If the Selected defect has been raised against an Asset item the Asset Reference will be displayed.

Asset Id ***(Display Only)***

If the Selected defect has been raised against an Asset item the Asset Id will be displayed.

Treatment ***(Optional)*** ***List***

If required, select a treatment code to rectify the current defect.

Sheet ***(Optional)*** ***List***

The defects work sheet number will be displayed.

Labour Units ***(Display Only)***

Displays the number of labour units estimated to rectify this defect. This is derived from the contract under which this works order is being raised.

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Schedule *(Display Only)*

This field will display the cyclic maintenance schedule name. For a defect clearance works order it will always be blank.

Status *(Required)* *List*

Displays the current status of the works order line.

Initially a works order line will have a status of DRAFT. As work on the Works Order Line progress's this Status will be changed either by the User, in the case of Interim Payments or automatically by the system as is the case when a Works Order line is included on a Payment Run.

Note: When updating the status code you must select [Tab] to move to the next field before entering any further data.

Note: Any new work order lines added to a work order that is instructed will have the status of INSTRUCTED.

Completed *(Required)*

Enter the completion date of the works order line.

Est Cost *(Display Only)*

This field displays the estimated cost of the repair. This cost is calculated from the contract rates.

Note that if this field is blank there is no rate on the current contract for this job item and, therefore, the system is unable to calculate the cost of the job item and the works order cannot be instructed.

Gang *(Required)*

If Gang Allocation has been used to allocate a gang to the repair of this defect the gang id will be displayed.

Work Cat *(Required)*

The work category for the selected defect will be displayed. If budgets are being used a commitment will be made against this Item code. The current position of the Budget can be displayed by double clicking this field as shown below. The current value of work committed, the actual value of work carried and the overall balance will be displayed for each Budget. The Upper Limit of the Budget will also be displayed.

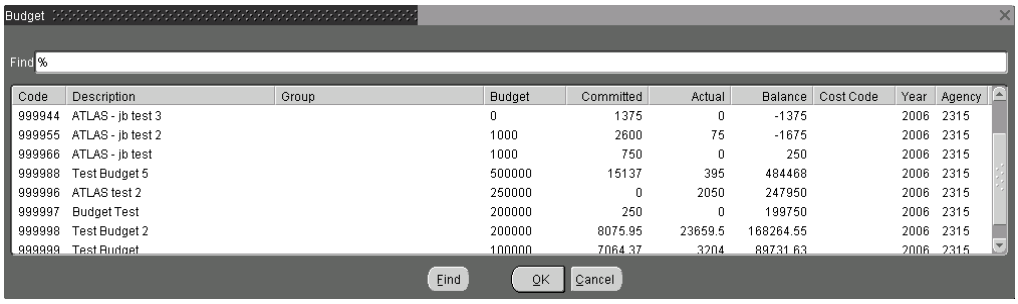

Figure 97 - Work Category

Repaired *(Display Only)*

The date and time of the defect repair will be displayed.

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Act Cost *(Display Only)*

This field will display the actual cost of repairing this defect. As the actual cost is only known once the defect has been repaired and the Status updated to COMPLETED, or an Interim Payment has been made and the Status updated to PART-PAID this field will initially be blank.

Invoice *(Display Only)*

This is a payment Invoice flag used within the Financial Payment process. Valid values are:

- Null No invoices have been processed or the status is instructed.
- O At least one outstanding records remains in the payments table
- H At least one held record remains in the payments table
- B Both held and outstanding records remain in the payments table
- A Only approved records remain in the payments table

Registerable *(Checkbox)*

This tick box is used to indicate whether an individual line should be registered with TMA. If this is checked the 'Registerable' tick box at the work order level will be updated automatically (if not already checked).

Register Status *(Display Only)*

This Line level Register Status field indicates the Noticing Status of the individual work order line. The status of this field depends on the following logic:

- Nothing Registered – The WOL has been ticked as 'Registerable' but no Notices have been sent for it.
- Outstanding – The WOL has been ticked as 'Registerable' and at least one Notice has been sent for it but not a 0600 – Works Stop Notice.
- Completed – The WOL has been ticked as 'Registerable' and a 0600 – Works Stop Notice has been sent.

Once a Works Order Line has been included in a Payment Run the Invoice details can be viewed by pressing the [Invoices] button on the window.

Target Date *(Required)*

The target date for the work order line can be entered manually for non defect clearance work orders. The target dates for the individual work order lines will affect the overall work order Target Date.

For defect clearance work orders:

When a defect and its associated repair are created, the repair has a Target Complete Date associated with it.

When a work order line is created from a defect repair and the work order is instructed or when a repair is selected onto an existing instructed work order, the work order line Target Date may be calculated in one of two ways depending upon how the Recalculate Repair Due Dates checkbox has been set in Contracts – MAI3880.

1. If unchecked, the work order line Target Date will be populated with the associated Repair Date Due.
2. If checked, the work order line Target Date will be calculated by applying the same Interval used for the Repair Due Date to the Works Order Instructed Date.

   The interval used is derived from the associated:-

   - Defect Activity
   - Defect Priority
   - Repair Category

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This may be used for the following reason:

For example, if a defect has been found at the end of the working day that should be repaired within 24hours, by the time the defect is loaded, placed onto a work order the following day, instructed and passed to the contractor, several hours may have passed and the contractor may not physically have time to repair the defect based on the time the defect was found. This option resets the work order line target date based on the time the associated work order was instructed and sent to the contractor (if the CIM interface is used) and hence does not skew the KPI's in a way to disadvantage the contractor.

A number of buttons have been defined on this window for use when raising a works order, they are as follows:

[BOQ Items] Opens the BOQ Items window where BOQ items can be added to or removed from the selected works order line (Figure 101)

[Select Defects] Opens the Selection Criteria window and allows the user to select the defects that are to be included on the works order. (Figure 99)

[View Notices] This button is enabled when one or more streetwork notices have been sent for the currently selected work order line. The Work Order TMA Interface – TMA3990 is called in read only mode and is navigated to the Work Order Lines tab. (Figure 73)

[TMA Interface] This button is enabled when one or more work order lines are ticked as Registerable. The Work Order TMA Interface – TMA3990 is called and is navigated to the TMA Noticing tab (this is the same functionality as the Work Order level [TMA Interface] button). (Figure 72)

[Get From Map] This button is enabled when the WOL Id is populated and the Work Order Line status is not COMPLETE. Locator – NM0572 is called to allow the user to digitise a new location or shape for the defect or work order. This will give the user the option to enter a point, polyline or polygon that better represents the location and the shape of the work to be carried out on the selected work order line. (Figure 36)

[Invoices] This will display any interim payment invoices that apply to this work order line. (Figure 113)

[Copy Line] This will create a copy of the selected works order line and associated BOQ items, the following pop up window will be displayed allowing the user to copy the BOQ items and their associated estimated quantities or copy the BOQ items only without the estimated quantities.

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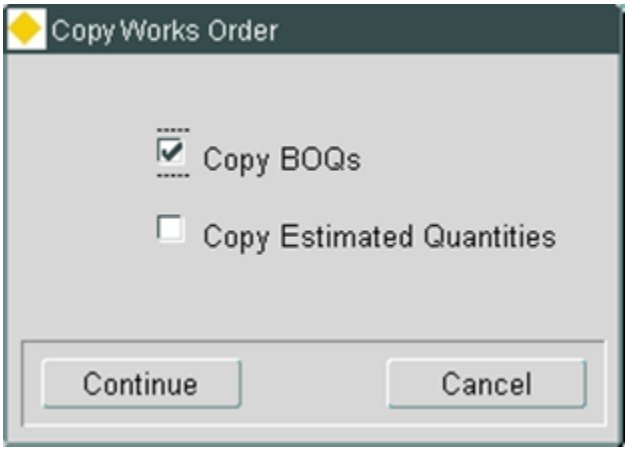

Figure 98 - Copy Works Order Line popup

[Continue] will create new copy of the Work Order or Work Order Line.

[Cancel] will return the user to the Work Order details with no changes made.

A work order line can only be copied if it a small scheme order.

[Summary] Opens the Defects summary window and displays a summary for each of the works order lines on the currently selected Works Order.

To view a defect clearance works order line in detail, select the desired line and press the [Expand] button on the form, this will display the defect details using Defects – MAI3806, In addition full information for the work order line can be viewed by selecting the [Navigator] button (Figure 94).

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3.5.4 Selection Criteria

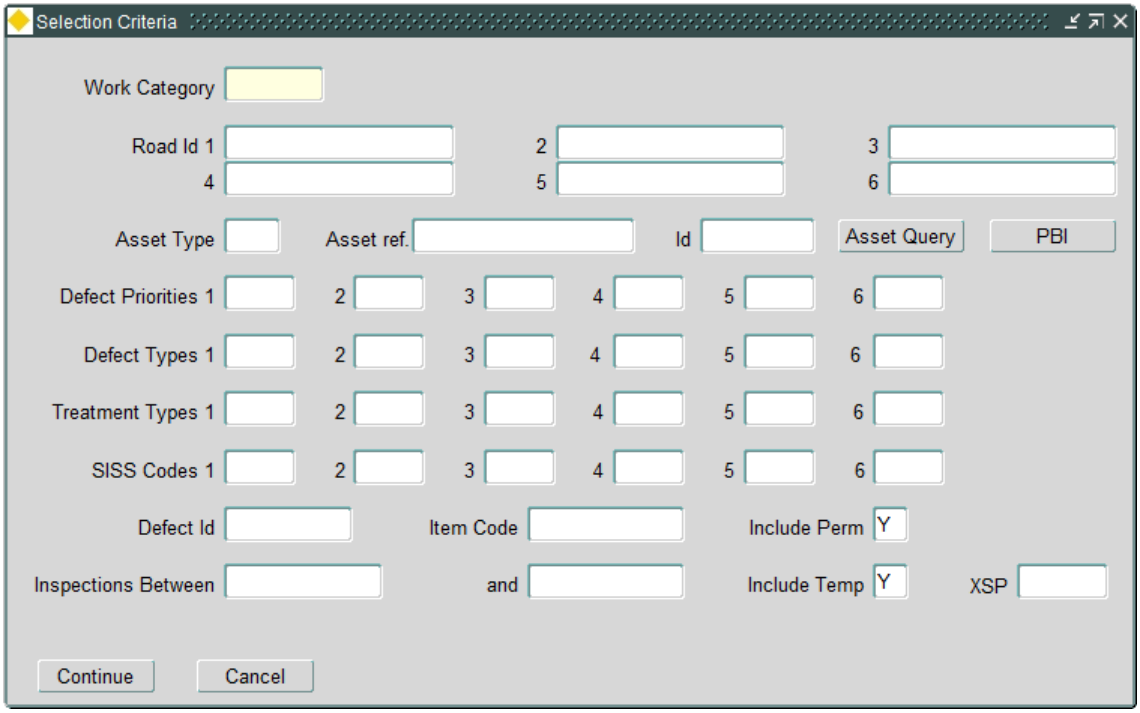

Figure 99 - Selection Criteria

This window is displayed when the [Select Defects] button is pressed in the Work Order Lines window.

This window contains a collection of selection criteria fields enabling you to select a defect or defects to be used for this works order. Enter enough of these fields to restrict the selection to the required defects.

Defects may also be selected using the [Asset Query] button or the [PBI] button. This allows you to select defects, which have been raised against particular Asset Items. Pressing the [Asset Query] button will call the Query Asset window and allow you to select an individual asset item. This would allow you to select any AVAILABLE defects raised against the item.

The [PBI] button allows the user to define a Parameter Based Inquiry and select any AVAILABLE defects raised against the resulting assets items of the inquiry.

Work Category ***(Required)*** ***List***

Select a work category from the List of Values, these values are linked to budgets and are therefore mandatory. Only defects with activities that apply to this work category will be selected for inclusion on the current works order.

Activities are associated to a work category using Item Code Breakdowns – MAI1940.

Road Id 1-6 ***(Optional)*** ***List***

If required, select up to 6 roads. Only those defects situated in the specified roads will be selected for inclusion on the current works order.

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Asset Type ***(Optional)*** ***List***

If required, enter an Type of Asset defect shave been raised against. The list of values will only display asset items for the selected Road Group.

Asset Ref ***(Optional)***

Enter the Asset Reference of the Item to be selected.

Id ***(Optional)***

Enter the Asset Id of the item to be selected.

Defect Priorities 1-6 ***(Optional)*** ***List***

If required, select up to 6 defect priority codes. Only those defects with matching priority codes will be selected for inclusion on this works order.

Defect Types 1-6 ***(Optional)*** ***List***

If required, select up to 6 defect types. Only those defects with matching defect types will be selected for inclusion on this works order.

Treatment Types 1-6 ***(Optional)*** ***List***

If required, select up to 6 treatment type codes. Only those defects with matching treatment type codes will be selected for inclusion on this works order.

SISS Codes 1-6 ***(Optional)*** ***List***

If required, select up to 6 Standard Item Sub Section (SISS) codes. Only those defects with matching SISS codes will be selected for inclusion on this works order.

Gang Work Type 1-6 ***(Optional)*** ***List***

If required, select up to 6 gang work types. Only those defects that contain SOR items that have been linked to the selected gang work types will be retrieved. SOR items are linked to Gang work types using Standard Items – MAI3888.

Defect Id ***(Optional)***

If required, enter the unique defect ID to identify an individual defect to be included on the current works order.

Item Code ***(Optional)*** ***List***

If required, select the standard job item code representing a particular item of work. All defects which have this job item logged as the suggested repair will be selected for inclusion on the current works order. Note that wildcards may be used in the item code.

Include Perm ***(Optional,Default)***

Enter ‘Y’ to include defects with permanent repairs in the search specified above. The default value is 'Y'.

Inspections between and ***(Optional)***

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If required, enter two dates representing a date range. Only those defects resulting from inspections taking place between these two dates will be selected for inclusion on the current works order.

Include Temp ***(Optional,Default)***

Enter 'Y' to include defects with temporary repairs in the search specified above. The default value is 'Y'.

XSP ***(Optional)*** ***List***

If required, select a valid Cross-Sectional Position (XSP). Only those defects located at the specified XSP will be selected for inclusion on the current works order.

Once you have entered enough selection criteria to select the defects you want to work with, press the [Continue] button to start the search.

The system will search all outstanding defects to find those that match the criteria defined above. When this search is complete the following window will be displayed showing all defects that match your search criteria.

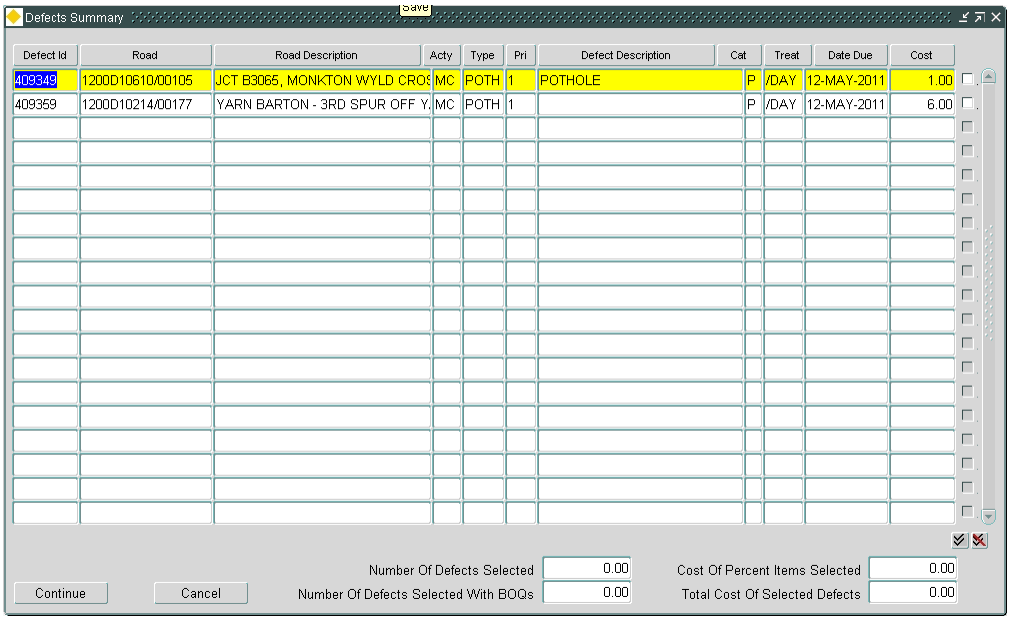

Figure 100 - Defect Summary

1. Select the required defects by checking the check box on the right.
2. Select [Set All] to select all defects displayed.
3. Select [Unset All] to unselect all defects.
4. As the defects are selected a running total of useful information is displayed along the bottom of the window.
5. Press the [Cancel] button to return to the Selection Criteria screen enabling you to refine your search criteria and initiate another search.
6. Press the [Continue] button to add the selected defects to the works order.

Note: If any of the selected defects have documents associated with them (through document manager), these documents will automatically be associated with the Works Order as well.

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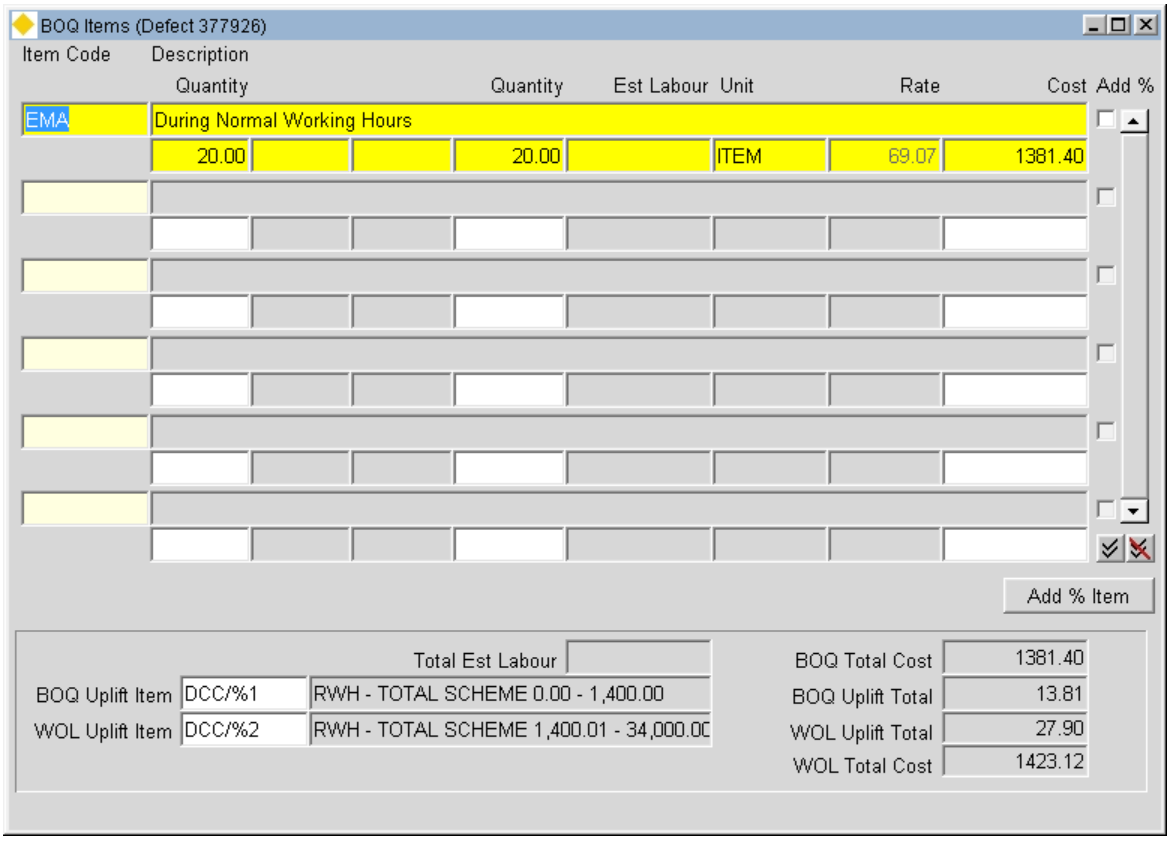

Figure 101 - BOQ Items

3.5.5 BOQ Items

This window is displayed when the [BOQ Items] button is pressed in the Work Order Lines window.

This window enables you to select the BOQ items to rectify the defect specified in the Work Order Lines window. Initially, it will be populated with the BOQ items specified by the inspector at the time that the defect was recorded either entered onto the DCD, using treatment models or recorded manually.

Should you want to add further items, press the [Create Record] button in the toolbar. This will enable you to add a new item.

Note: To avoid problems the [Save] button should be used when each BOQ item has been added.

Note: Once the work order has been instructed, if the wrong BOQ has been entered or the band has changed prior to the entry of the actual values the incorrect BOQ item should be zeroed (it cannot be deleted as it has been used in the definition of the estimated values) before entering the correct item.

Item Code ***(Required)*** ***List***

Select a valid standard job item to represent a task to be carried out by the contractor.

All items added must exist on the selected contract.

Description ***(Display Only)***

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Displays the description of the standard job item. Note that for Rogue Items, this field becomes updateable to allow you to describe the Rogue Item in greater detail.

Quantity ***(Required or Optional)***

The first three fields allow the user to specify up to three dimensions associated to the Item if they are required for the specified item. Each standard job item can have one or more dimensions associated with it, depending on the nature of the work represented by the job item. For example, replacing damaged kerbing will have a single dimension representing the length of kerbing to be replaced, whilst filling a pothole may have three dimensions representing the length, width and depth of the pothole to be filled. Consequently, these three dimension fields are Required or Optional according to the needs of the job in question.

Note: The message line will display a message explaining what unit of measurement should be used for each dimension field. This message will be of the form 'Enter the Length'.

Quantity ***(Display Only)***

Displays the calculated quantity of work based on the dimensions supplied in the previous fields. The unit of this field is displayed in the Unit field described below.

Est Labour ***(Display Only)***

Displays the estimated labour costs if they have been entered against the selected schedule item in Standard Items – MAI3888.

Unit ***(Display Only)***

Displays the unit of measurement of this job item. This unit relates to the Total Qty field described above.

Rate ***(Display Only)***

Displays the rate per unit for this work item as held on the contract under which this works order is being created. If a rouge item is added the rate must also be added to the item in this field.

Cost ***(Display Only)***

If the order is not issued the estimated cost will be displayed, if the order is complete the estimated costs are copied and will be displayed as actual costs

Details of both the estimated and actual costs and quantities can be viewed for each item by selecting the [Expand] button from the toolbar.

Add % ***(Check Box)***

If this item is to attract a percentage increase or decrease using a Percentage Item tick this box.

Note that only Standard Job Items which have the 'Allow Percentage Flag?' flag set to 'Y' in Standard Items – MAI3888 can have a Percentage Item associated with them. For information on adding Percentage Items to a Works Order line refer to the section Adding Percentage Items to a Works Order Line, below.

BOQ Uplift Item ***(Optional)*** ***List***

Enter the BOQ uplift item, this item will uplift all the BOQ items that have the 'Allow Percent Items ?' field set to 'Y' in Standard Items – MAI3888.

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The List of Values will only contain those items that have the 'BOQ Percent Uplift ?' set to 'Y' in Standard Items – MAI3888

WOL Uplift Item ***(Optional)*** ***List***

Enter the Work Order Line uplift item, this item will uplift the entire work order line.

The List of Values will only contain those items that have the 'WOL Percent Uplift ?' set to 'Y' in Standard Items – MAI3888

Note: When a Repair, having either BOQ or WOL Percent Uplift Item Codes assigned, is added to a Work Order, a check is made against the Contract for that work order to determine if the Standard Item Code has been assigned as a Contract Item, and that the contract will allow for Percentage Uplifts. If not, the user will be prevented from saving, or Instructing, the Work Order.

3.5.6 Percentage Uplifting of the value of an individual work order line

Entering a BOQ uplift item to a work order line will uplift the value of the work order line by applying the percentage uplift only to those BOQ items that have been flagged as 'Allow Percent Items' = 'Y' in Standard Items – MAI3888.

In addition, if the entire work order line needs a percentage uplift, entering a WOL Uplift item to the work order line will apply the uplift to the entire line including any BOQ percentage uplifts that have already been applied.

Note: If the value of the Work Order needs to be uplifted based on a banding for the value of the entire work order then Discount Groups – MAI3624 (Maintenance Manager Admin) should be used.

3.5.7 Adding Individual Percentage Items to a BOQ Item

Adding a Percentage Item to a Bill Of Quantities allows the cost of the BOQ item to which the Percentage Item is associated, to be increased or decreased depending on the percentage value defined for the Percentage Item in the selected Contract. For example, work carried out on Bank Holidays may attract a percentage surcharge. Adding a Percentage Item to the BOQ would allow this surcharge to be applied.

Percentage Items may only be associated with the Standard Job Items which have the 'Allow Percent Items ?' flag set to 'Y' in Standard Items – MAI3888 (Maintenance Manager System Administration Manual)

Percentage Items are those Standard Job Items which have the Unit of Measurement as defined for Product Option PERC_ITEM e.g., PERCENTAGE.

The computation method for a Percentage Item is determined by Product Option CUM_PERC and can either by:

NORMAL When set to NORMAL a percentage item will display the percentage of the standard item.

Or

CUMULATIVE A setting of CUMULATIVE will result in the percentage item being the sum of the standard item and other percentage items related to the standard item.

The Product Option Value can be overridden by adding the required value into the 'Percent Item Computation' field in the program details window. This will set the Computation method for any subsequent Percentage Items added to a BOQ for a Works Order line on the current Works Order, to the value entered. This allows for different Computation methods to be used without the need to edit the Product Option value.

Note: These Values (Normal and Cumulative) are defined in Status Codes – HIG9110 and Domain Code PERC_ITEM_COMP.

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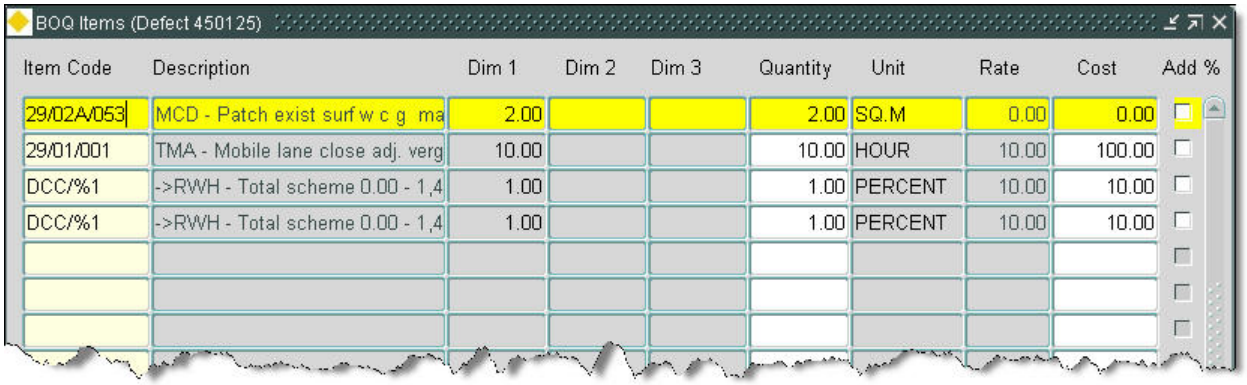

Figure 102 - Normal Computation Method Computation Method

Figure 102 shows a Bill of Quantities where an Item Code, 29/01/001, has a cost of £100.00. A percentage Item has been associated with it because the bituminous material being used for the repair is of a special grade. The Percentage Item selected has a rate of 10 % thus the total cost of the repair will be increased by £10.00 to £110.00.

If this work was to be carried out on a weekend, and weekend work attracted a surcharge of 10% on the total cost of a repair a 2nd percentage item could be associated with the BOQ item to allow for this. If the weekend surcharge only applied to the cost of the initial Item Code i.e. £100, the extra cost for weekend work would an extra £10 and the computation method used to calculate this would be NORMAL.

If however, the weekend surcharge applies to the Initial Item Code and any other Percentage Items associated with BOQ Item, the computation method used should be set to CUMULATIVE. Figure 103 shows the same BOQ item with Product Option CUM_PERC set to CUMULATIVE.

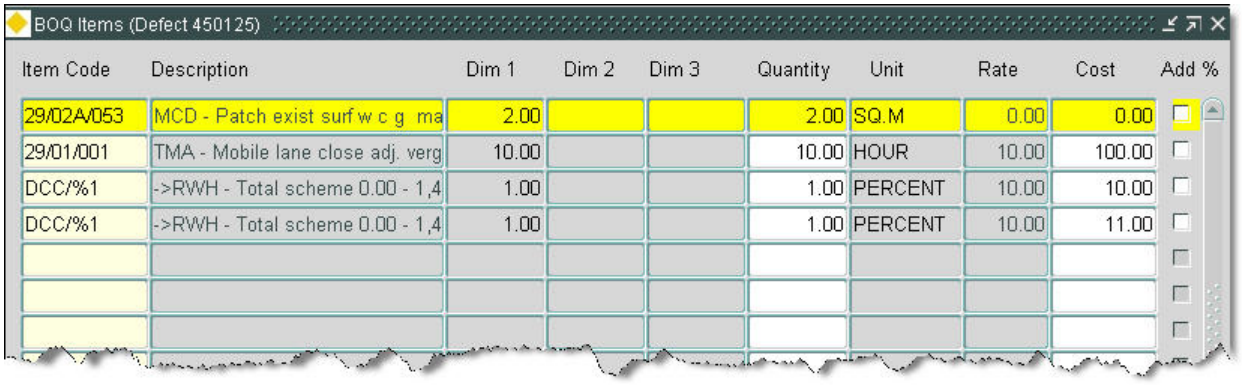

Figure 103 - Cumulative Computation Method

The initial Percentage Item has been calculated as a percentage of the cost of the BOQ item 29/01/001, i.e. 10% of £100.00 equaling £10. The 2nd Percentage Item for Weekend Work has been calculated as a percentage of the sum of the initial BOQ Item 29/01/001 + the initial Percentage Item, i.e. 10% of (£100+£10) giving a total cost of £121.00.

3.5.8 Adding a Percentage BOQ Item

To add a Percentage Item to a Bill of Quantities the Percentage Item must have added to the currently selected Contract. If a different Contract is subsequently selected, the Works Order cannot be Instructed unless the Percentage Item has also been added to the newly selected Contract.

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To add a Percentage Item do the following:

1. Navigate to the BOQ Items window by clicking on the [BOQ Items] button on the Works Order Lines window.
2. Select the BOQ Item to which the Percentage Item is to be added.
3. Note that this item must have the 'Allow Percentage Item ?' filed set to 'Y' in Standard Items – MAI3888.
4. Check the 'Add %' box for the selected Item on the right of the window.
5. Click on the [Add % Item] button on the BOQ Items window.
6. A list of valid Percentage Items will be displayed.
7. Select the required percentage item from the List
8. The selected percentage item will be added to the BOQ. An → will be displayed beside the percentage item to signify that it is a child item of the main Standard Job Item

Note: Quantities for Percentage Items cannot be amended.

- Select the [Check All] to check all BOQ items displayed.
- Select [Uncheck All] to clear all checked BOQ items.

3.5.9 Adding Non-Contract Items to a Works Order

Normally, the Bill Of Quantities on a works order is defined as a series of standard job items as described above. These items have agreed unit rates. Occasionally, however, it is required to add an item to a works order that is not on the contract. This can be achieved by the use of Rogue Items (sometimes known as 'Wildcard Items').

A Rogue Item is simply a standard job item with no preset rate, quantity or description. Generally, it will have item codes ending '9999'. When you select a Rogue Item from the list of items the Item Description, Total Qty, and Rate fields will be empty. You can then complete these fields to effectively create a non-standard item. It is important to note that for the software to be able to calculate the works order totals correctly, you must enter a rate for the Rogue Item.

Standard job items (including Rogue Items) are managed through Standard Items – MAI3888 (For further information on Standard Items, refer to the Contracts and Contractors section of the Maintenance Manager Administration Manual).

Contracts and Rates

It is possible to select standard job items which do not appear on the current contract for this works order. These items can be identified as the Rate field will be empty, indicating that there is no known unit rate for this item in the selected contract. In this situation, the software will not be able to calculate the Total Qty for this item and can therefore not cost the works order correctly. This can be used effectively when comparing multiple contracts, the contract selected when raising the works order may not be the contract suitable once all the schedule items have been entered.

To circumvent this situation you must do one of the following actions:

- Replace the job item with an item which appears on the current contract.
- Replace the job item with a Rogue Item.
- Select a different contract.
- Add the missing item to the current contract.

As a general rule, the works order can only be issued and printed when all the items on it have a rate, either from the contract or as rogue items.

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3.5.10 Works Order Audit

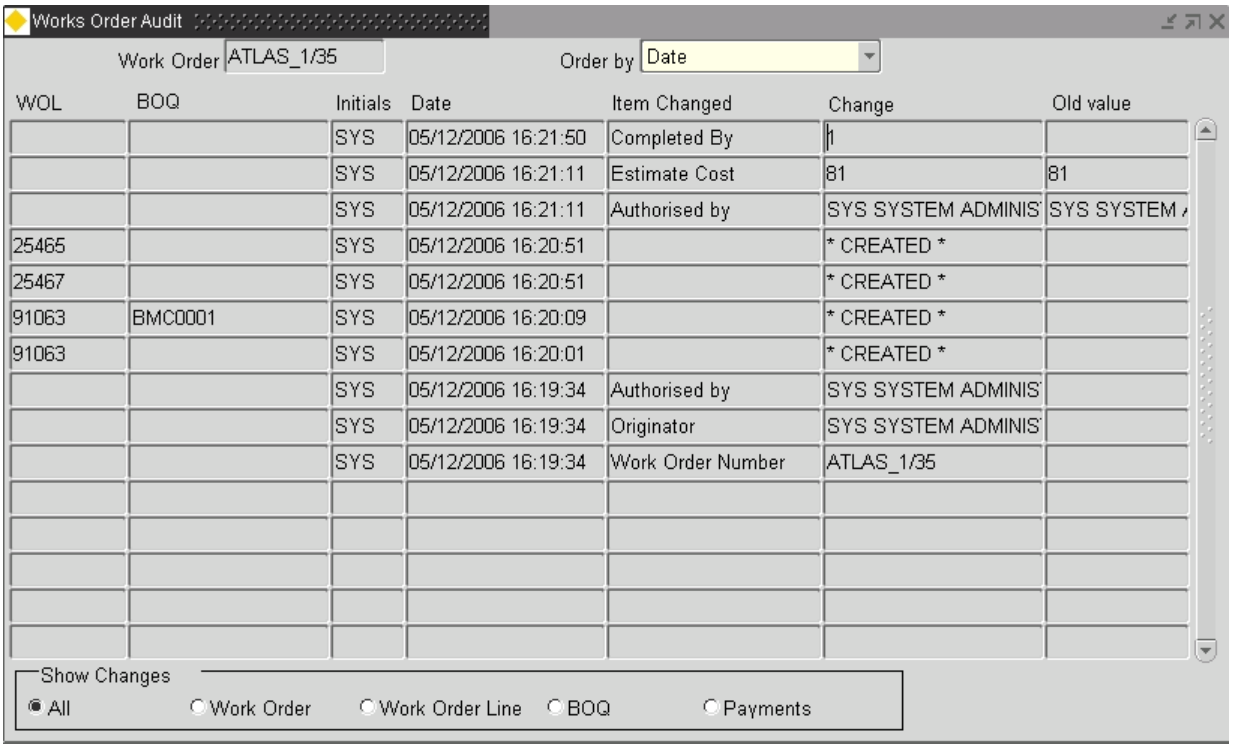
Works Order Audit
Work Order ATLAS_1/35
Order by Date
WOL BOQ Initials Date Item Changed Change Old value
SYS 05/12/2006 16:21:50 Completed By 1
SYS 05/12/2006 16:21:11 Estimate Cost 81 81
SYS 05/12/2006 16:21:11 Authorised by SYS SYSTEM ADMINIS SYS SYSTEM
25465 SYS 05/12/2006 16:20:51 * CREATED *
25467 SYS 05/12/2006 16:20:51 * CREATED *
91063 BMC0001 SYS 05/12/2006 16:20:09 * CREATED *
91063 SYS 05/12/2006 16:20:01 * CREATED *
SYS 05/12/2006 16:19:34 Authorised by SYS SYSTEM ADMINIS
SYS 05/12/2006 16:19:34 Originator SYS SYSTEM ADMINIS
SYS 05/12/2006 16:19:34 Work Order Number ATLAS_1/35
Show Changes
All Work Order Work Order Line BOQ Payments

Figure 104 - Work Order Audit

The Works Order Audit shows the changes made to the fields on the Works Order which have been selected in form Works Order Audit Maintenance – MAI3803 and can be called by pressing the [Expand] button on the menu toolbar form the main Works Order window.

The size of the Audit log trail can be restricted by setting Product Option AUDIT_ALL to 'N'. If this option is set to 'N', only the initial and final values of a field are recorded in the Audit trail, per session per User and any intermediate changes are not be logged.

If Product Option AUDIT_ALL is set to 'Y' then all changes to the selected fields are logged. It should be noted that for some Works Orders, the audit trail could be very large if this option is set to 'Y'.

The Order in which Audited changes are displayed can be determined by setting a value in the 'Order By' field.

In addition work order auditing may be carried out using Audit Manager, see the Audit Manager User Guide.

The type of audited changes displayed can be determined by clicking the appropriate check box in the 'Show Changes' portion of the window as shown below

The changes displayed can be restricted to the following areas:

- Main Works Order changes
- Works Order Line changes

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- Bill Of Quantity changes
- Payment detail changes

The following information is displayed

WOL ***(Display Only)***

The Defect Id or Works Order Line number will be displayed

BOQ ***(Display Only)***

The BOQ Standard Item Code will be displayed

Initials ***(Display Only)***

The initials of the User who made the change will be displayed

Date ***(Display Only)***

The Date and Time on which the changes were made will be displayed

Item Changed ***(Display Only)***

A brief description of the Item changed will be displayed.

Change (New Value) ***(Display Only)***

The new value of the changed item will be displayed.

Old Value ***(Display Only)***

The old value of the changed item will be displayed.

To close the Works Order Audit and return to the main Works Order form press the [Close] button on the window.

Audit Manager can now be used to audit the changes to a work order, work order line or BOQ items.

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3.5.11 BOQ Details

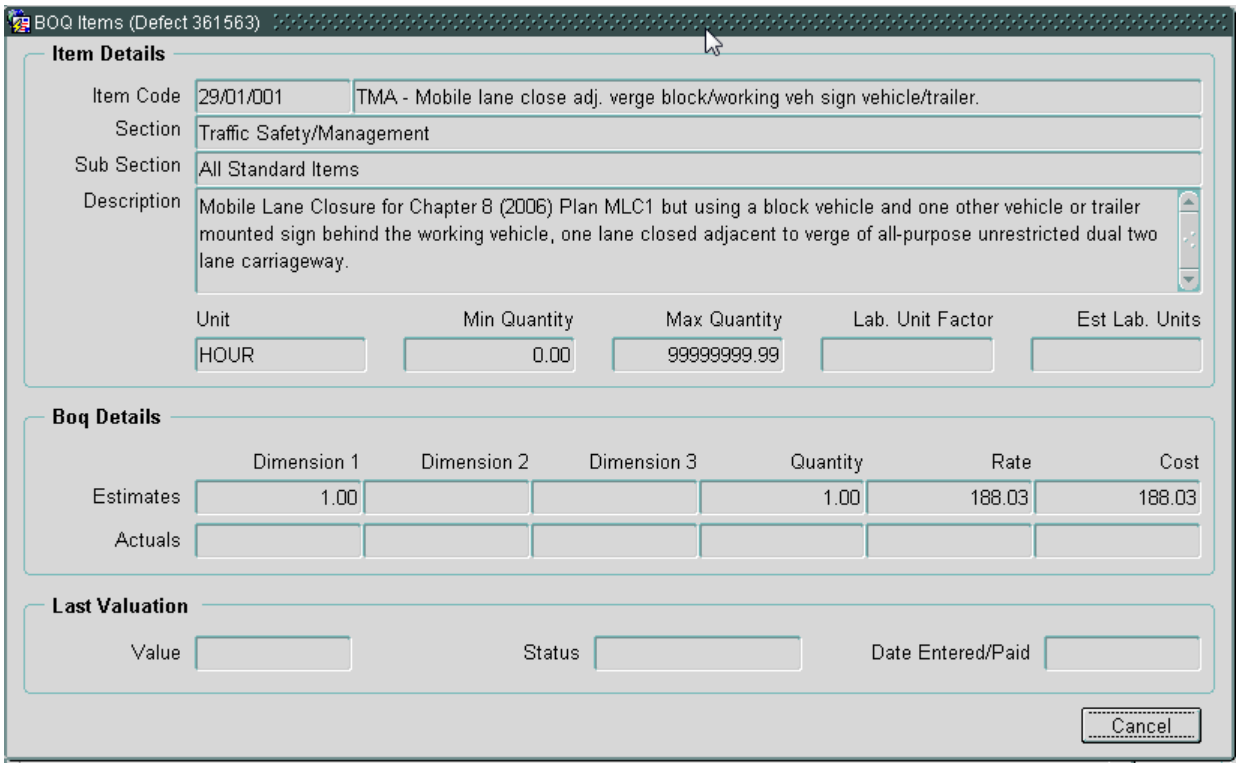

Figure 105 - BOQ Details

This window can be called by pressing the [Expand] button in the menu toolbar when a BOQ item is selected.

It is useful when entering quantities because if the items are banded, this window will show the minimum and maximum allowed values.

Details of the estimated and actual values are also displayed. If the Works Order Line on which the selected BOQ item is on, is part of an Interim Payment the Last Valuation cost, Status and the Date the Valuation was entered or the payment made will be displayed.

When entering a Valuation for an Interim Payment the Minimum Quantity limit for the Standard Item is overridden, but the Maximum Quantity limit is retained.

Select [Cancel] to return to the BOQ Items window

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3.5.12 Standard Item Totals

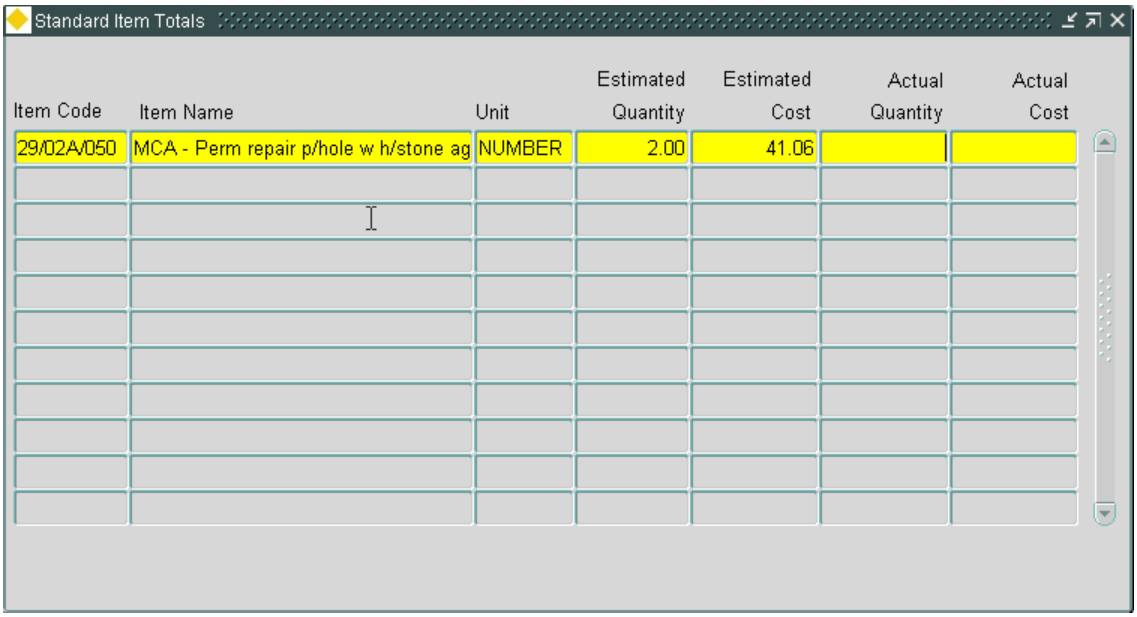

Figure 106 - Standard Item Totals

This window is displayed when the [Standard Item Totals] button is selected in the Works Orders Defects window.

It is a display only window, which shows all of the Standard Items currently on this Works Order, as well as the total quantities and costs, both estimated and actual, across the whole works order.

Note that the 'Actual' fields are only displayed after a works order line has been completed or an Interim payment made and will, therefore, initially be empty.

If the contractor has added additional items to the order the estimated values will be empty with the actual values being populated.

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3.5.13 Contractor Totals

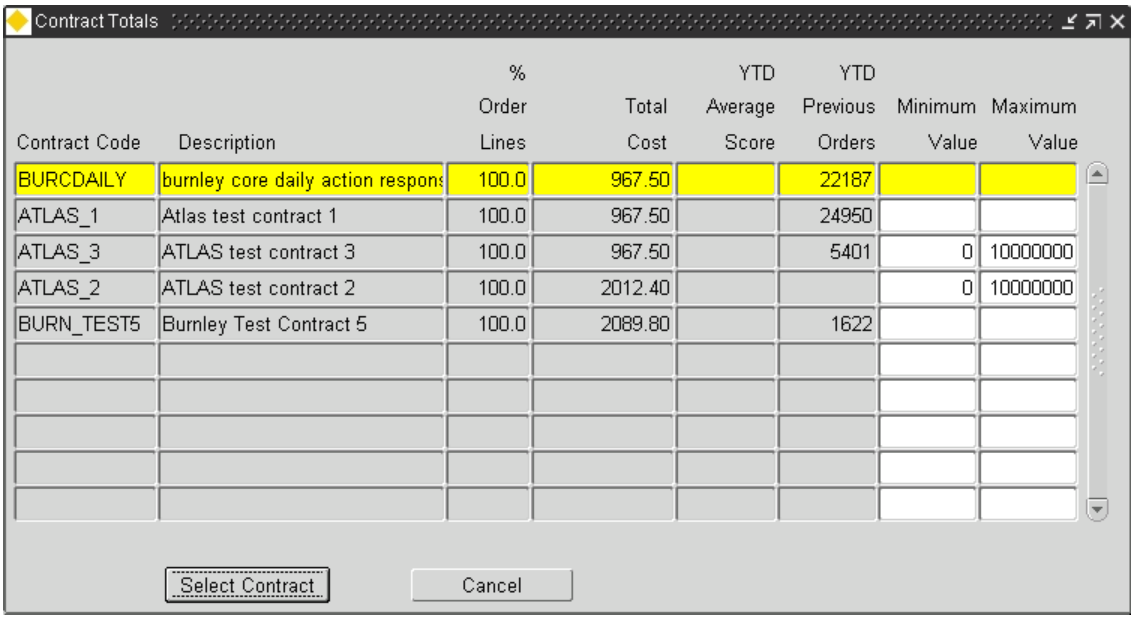

Figure 107 - Contractor Totals

This window is displayed when the [Contractor Totals] button is selected in the Works Orders Defects window .

It is a display only window which shows all contracts which can satisfy some or all of the work defined on the Works Order. For each contract, the window shows the percentage of the order lined that the contract has priced and can therefore complete, as well as the total cost where that contract is to be used. If available, the window will also show the average score achieved by that contractor over the past year to date, as well as the total value of orders placed with that contractor in the year to date.

If the Contractor has had a financial limit on Works Order values that may be issued to him imposed in Contractors – MAI3881, the Minimum and Maximum values will be displayed.

To select an alternative contract for use on this works order, highlight the required contract then select the [Select Contract] button.

If product Option WORREFGEN is set to either 'C' for 'Contract Based' Works Order Reference Number generation or 'A' for Administration Unit Works Order Reference Number Generation and the initial Contract selected is changed, the Works Order will Cancelled and an exact copy made with the new reference number being generated. The Works Order will have '**Cancelled**' appended to the start of it's description.

To return to the Works Order form without selecting a Contractor press the [Cancel] button.

If the Value of the Works Order is outside the limits set for the Contractor a warning will be displayed a shown below.

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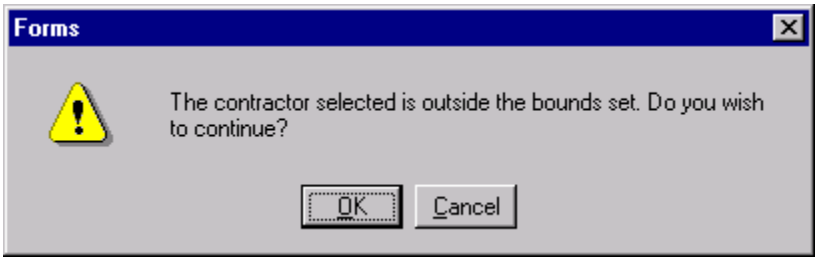

Figure 108 - Outside limit

To select the Contractor and override the warning press [OK] otherwise press [Cancel] to select an alternative Contractor.

If the Contractor selected is not the cheapest Contractor a window will appear requesting a reason as to why the cheapest Contractor was not selected. Enter the reason and press [OK] to continue with the selection.

Figure 109 -Reason

This will be displayed in the Additional Details Window.

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3.5.14 Work Order Flexible Attributes

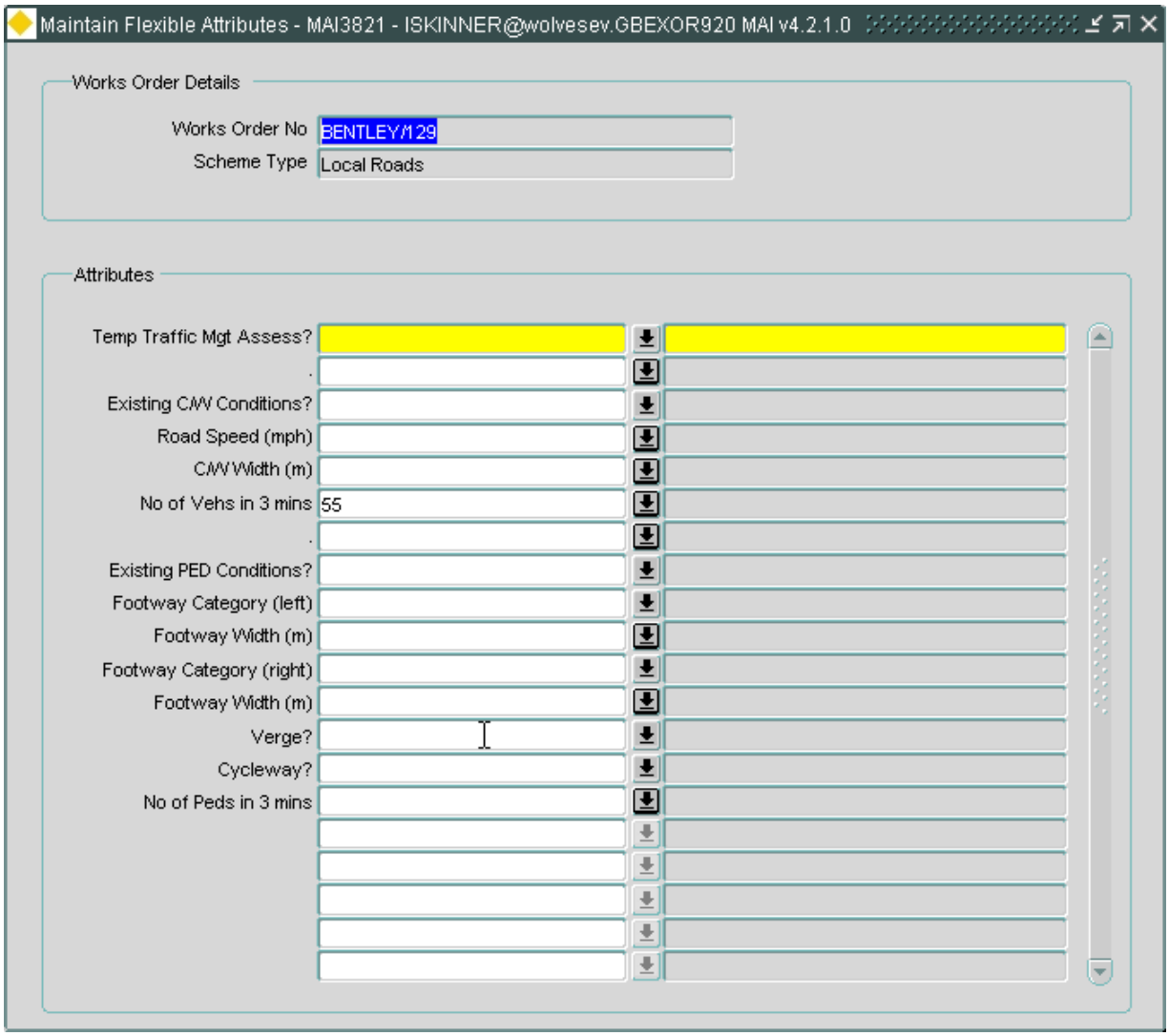

Figure 110 - Flexible Attributes

3.5.15 Flexible Attributes

Each different type of work order may potentially require a different set of information to be held against it. To facilitate this the work order flexible attributes can be linked to individual scheme type.

This allows the customer to define a set of attributes that are specific for a small scheme work order and another set specific for cyclic work orders. The attributes are based on scheme type.

The flexible attributes are set up using the standard asset meta model module by defining a special type of asset record, this asset record is then linked to the appropriate scheme type using Application Attributes – MAI3819.

The Attributes part of the form will display the flexible attributes of the asset metamodel mapped to the scheme type used in the work order. Attribute values can be added or modified.

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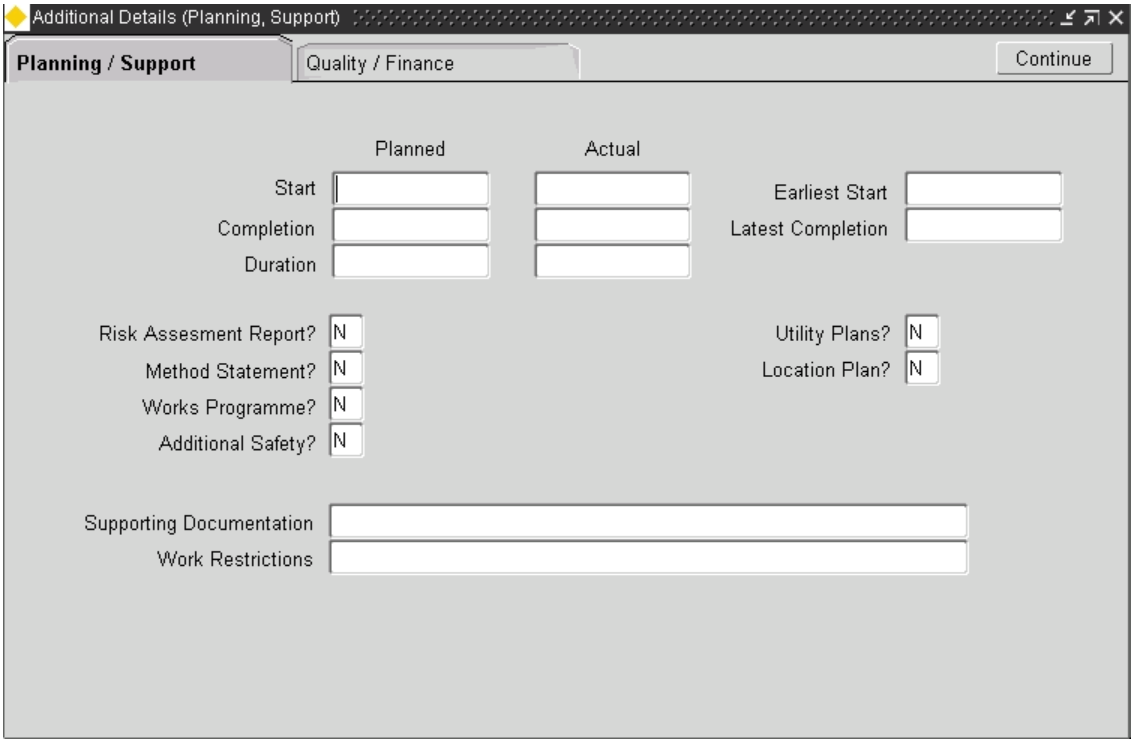

Figure 111 - Additional Details Planning/Support

3.5.16 Additional Details – Planning/Support

This window is displayed when the [Additional Details] button is selected in the Works Orders Defects window.
All the fields in this window are optional and are intended for information only.
Any documents that are to be held against a work order will be held using Document Manager.

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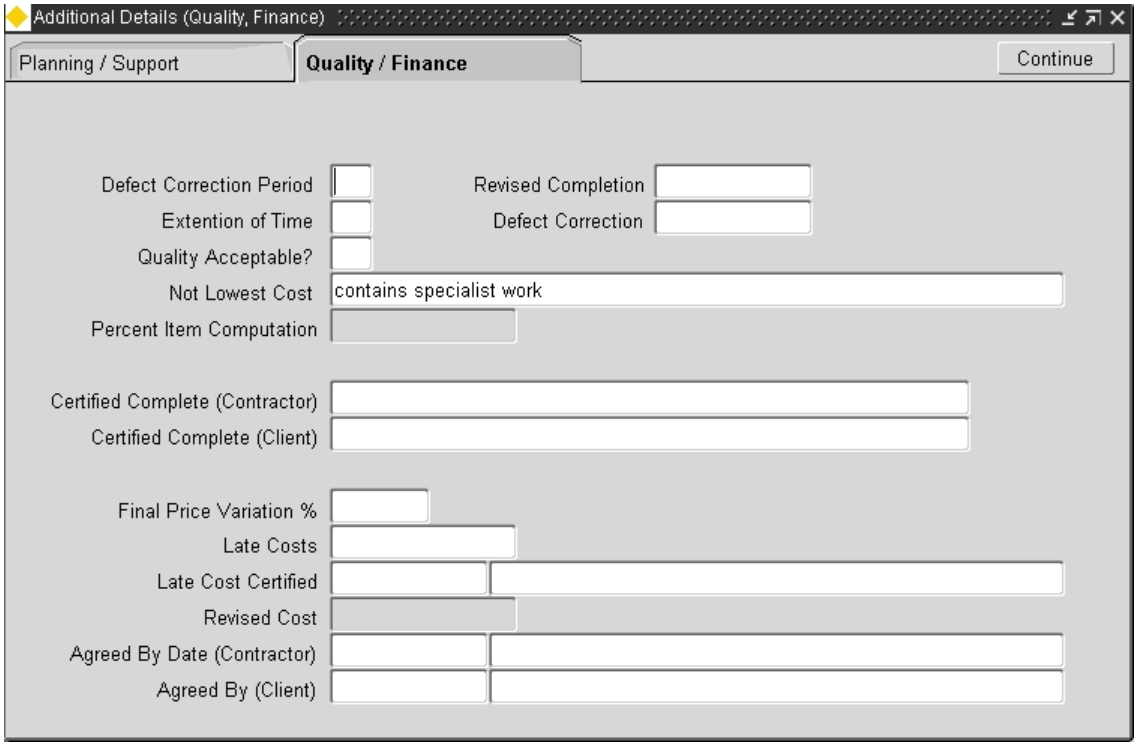

Figure 112 - Additional details Quality/Finance

3.5.17 Additional Details – Quality/Finance

This window is displayed when the [Additional Details] button is selected in the Works Orders Defects window.

All the fields within this window with the exception of 'Not Lowest Cost' and 'Percent Item Computation' are optional for additional information only and will be included for reference on works order prints.

Not Lowest Cost ***(Display Only)***

If the Cheapest qualifying Contractor is not selected, the reason entered as to why the cheapest Contractor was not selected will be displayed.

Percent Item Computation ***(Optional)*** ***(List)***

The Product Option Value can be overridden by adding the required value into the 'Percent Item Computation' field in the Program details window. This will set the Computation method for any subsequent Percentage Items added to a BOQ for a Works Order line on the current Works Order, to the value entered. This allows for different Computation methods to be used without the need to edit the Product Option value.

Select [Continue] to return to the Works Orders (Defects) window.

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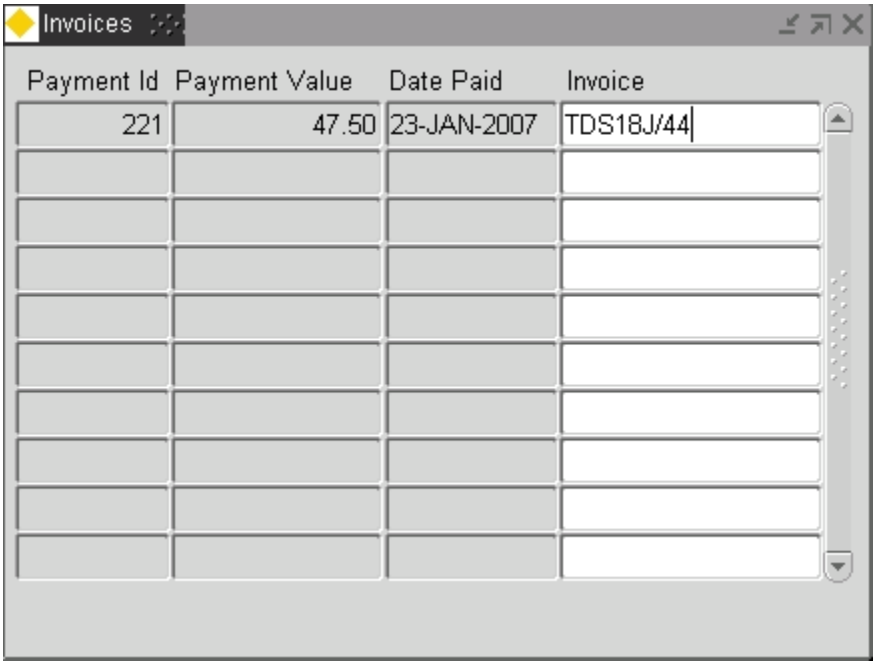

Figure 113 - Invoices

3.5.18 Invoices

Once a Works Order Line or Part of a Works Order Line, in the case of an Interim payment, has been included in payment run the Invoice details can be displayed by pressing the [Invoices] button on the Works Order Line window.

The Payment Id, Payment Value and Date Paid will be displayed. To add the Invoice number, click in the 'Invoice field' and enter the appropriate value. Press [Save] on the menu toolbar to save the changes.

If the Works Order Line has had a number of Interim Payments made against it, this is a good way to track the payments made to date.

Press the [Close] button to return to the Works Order Line window.

3.5.19 Making Interim Payments

Interim payments can be made on part of an individual Works Order Line if needed. This may used where the work ordered on a Works Order line may take a long period of time to complete or is of very high value. As work proceeds the Contractor may require payment for the work he has completed to date. Interim payments allow the Standard Items quantities to be amended to show the actual amount of work done to date or for new Standard Items to be added. Once the actual quantities have been added the Works Order Line can then be included in a payment run.

As the work progresses further, this Interim Payment process can be repeated until the work is Completed and the Final Payment is made.

If an Interim Payment is made on a Works Order Line raised to repair a defect, the defect status will be set to STR MAIN (the Status Code with feature 6 allowed).

A Works Order cannot be completed until all the Works Order Lines on the Works Order are Completed.

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Interim payments can only be made on Works Orders that have the 'Interim Payment?' flag set to 'Y'. This flag can be changed at any time.

To make an Interim Payment follow this process:

Select the Works Order Line for which to make the Interim Payment.

Set the Works Order Line status to VALUATION.

The BOQ estimated quantities will be stored and Zero estimates will be displayed in their place.

Enter the actual quantities of work done to date (that this is a cumulative amount)

Note: When entering a Valuation for an Interim Payment the Minimum Quantity limit for the Standard Item is overridden, but the Maximum Quantity limit is retained.

If required add any Percentage Items or other Standard Items needed.

Set the Works Order Line status to INTERIM.

Press the [Save] button on the menu toolbar.

The Works Order Line is now ready for part payment on the next Payment Run i.e. the work done to date will be paid, but the Works Order Line will not be Completed.

When the Works Order Line is included on a Payment Run the Status of the Works Order Line will be set to PART-PAID.

If a further Interim Payment is to be made on this Works Order Line simply repeat this process. Details of the last valuation can be seen for a BOQ item by pressing the [Expand] button on the menu toolbar when the BOQ item is selected.

3.5.20 Completing a Works Order Line with an Interim Payment

In order for a Works Order to be completed, all Works Order Lines on it must be completed. If a Works Order Line has had an Interim Payment made on it, it must also be set to Complete.

If any further work has been done since the last Valuation the Works Order Line Status should be changed to COMPLETED and the Actual quantity of work done to date entered (this should be the cumulative amount of all work done), otherwise the Works Order Line will keep the same Actual amounts as for the last Valuation.

When the Works Order Line is Completed and is included in the next payment run, no payment will be made if the Actual quantities have not been changed since the last Valuation.

3.5.21 Completing a Works Order

When completing a works order it is possible to update the schedule items to reflect the actual cost of repairing the defect. A works order can be partially completed by completing individual works order lines or fully completed by completing the whole works order, the limitation to completing the full works order by selecting the [Completed] button is that the costs of each individual line can not be amended to reflect the actual costs of the work.

To enter the actual cost of a works order line follow this procedure:

1. Change the status of the works order line to COMPLETED.
2. Enter the completed date.
3. Update the dimensions in the BOQ Items window to the actual dimensions.
4. Add any further BOQ items if required.
5. Save the changes

Once the changes have been saved no further changes can be made to that works order line. Once all works order lines are completed the works order will be completed.

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This status can change to COMPLETED in one of two ways, they are as follows:

The [Complete] button is selected in the Works Orders Defects window. This will complete all works order lines in the current works order, the completed date will also be entered in the next field. If this method is used changes cannot be made to the actual values of the BOQ items.

The User changes the individual work order line to completed manually and enters a date in the next field. At this point changes can be made to the actual values of the BOQ items, these changes must be made before saving the changes.

As the works order line passes through the payments cycle the status will be updated automatically.

3.5.22 Changing a Completed Works Order

Once a Works Order or Works Order Line is complete no changes can be made to the value of the order.

If however, when it comes to payment, the Works Order or Works Order Line is held because actual values of the work are in excess of the allowable differences between estimated values and actual values, the actual values may need to be re-entered.

This is carried out with the following procedure:

1. Retrieve the completed works order that needs amending.
2. Move to the relevant works order line.
3. Change the status back to INSTRUCTED.
4. Save the change.

   This will result in the actual quantities and costs for the selected works order line being removed, the completed dates will be cleared in both the selected works order line and the main works order window and the actual costs will be updated in the works order window.

Costs will be returned to Committed from Actuals within Budgets.

Follow the procedure for completing a Works Order to enter the amended actual values.

3.5.23 Raising a Notice In the Street Works Register

Some activities in the highway require information to be sent to the local ‘Street Works Register’. The Traffic Management Act (TMA) will introduce new responsibilities on Highway Authorities for those activities that are ‘Registerable’. The following is an extract from the TMA code of practice (issued under consultation):

3.5.23.1 Registerable Works

3.5.23.1.1 Works as designated in 3.5.23.1.2 have to be recorded on the Register. Street works notified by undertakers in accordance with the provisions laid down in the regulations and chapter 6 of this Code of Practice shall be recorded in the register by the street authority. Any works which are not notified in accordance with the provisions in the NRSWA as set out in Chapter 6 are unlikely to be picked up by the street authority and included on the Register. It is therefore self evident that as far as street works are concerned only those works which are notifiable will in fact be Registerable, and although strictly speaking the two definitions are not legally the same, to all intents and purposes they are the same thing in practice. However, NRSWA does not require local authority road works to be notified in the same way, although they do need to be registered. Therefore, how a local authority registers its own works is a matter for it to decide, but it is strongly recommended that they use the same process.

3.5.23.1.2 The requirement is to register, for all works promoters:

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1. All works that involve the breaking up or resurfacing of any street, (but see below for pole testing involving excavation.).
2. All works that involve the opening of the carriageway or cycleway of traffic sensitive streets at traffic sensitive times.
3. All works that require the use of any form of temporary traffic control as defined in the Code of Practice for Safety at Street Works and Road Works.
4. All works that reduce the number of lanes available on a carriageway of three or more lanes.
5. All works that require a temporary traffic restriction order or notice or the suspension of pedestrian crossing facilities
6. All works that require a reduction in width of the existing carriageway of a traffic sensitive street at a traffic sensitive time.

Non Registerable

1. Traffic Census Surveys

   Traffic census surveys have deliberately not been included as disclosure of this information prior to a census taking place can encourage a change to the normal pattern of traffic flows.

2. Pole testing

   Pole testing involving excavation does not require registration via the noticing system in advance of work commencing as per other types of excavation, unless one or more of rules 2 – 6 above, apply. However in all circumstances the work must be registered within 10 days of completion

3.5.23.1.3 Regulations provide that the register must record the following information:

- Particulars of all notices under sections 54, 55 and 57 served to the highway authority relating to street works in any street which is a maintainable highway;
- Particulars of all notices given under sections 54, 55 and 57 served on street managers relating to street works in any street which is not a maintainable highway;
- Particulars of all directions given under section 56 or 56A;
- Particulars of all notices, consents and directions published or given by a street authority under section 58 or 58A;
- Particulars of all notices served by an undertaker under section 58A;
- Particulars of all notices served by a street authority under section 66;
- Particulars of all notices given by a street authority under s72(3);
- Particulars of all notices given under section 74 [or 74A];
- Description and location of street works for which plans and sections have been submitted under Schedule 4 to NRSWA (streets with special engineering difficulties);
- Particulars of notices given by any relevant authority under Schedule 4 to NRSWA;
- Details of every street for which the local highway authority are the street authority;
- Details of every street which is a prospectively maintainable highway;
- Details of every street, of which the local highway authority is aware, which is a highway but for which they are not the street authority;

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- Details of every street, or part of street, which is a) a protected street; b) a street with special engineering difficulties or c) a traffic-sensitive street or proposed designations;
- Description and location of both street authority works for road purposes and any such works that are proposed;
- Particular of consents under s61, along with any conditions, or directions under s62;
- Particulars of street works licenses, including details of conditions and changes of ownership;
- Information under section 70(3) and (4A) as to completion of reinstatements;
- Particulars of apparatus notified to the street authority under section 80(2);
- Every notice of works under section 85(2);
- Details of road closure and diversions where an order under section 14 of the Road Traffic Regulation Act 1984 is required.
- The road category of each street.

3.5.23.1.4 Registerable and notifiable works

There is a difference between Registerable works and notifiable works. The difference is not great in practice as far as street works are concerned, but Registerable works are those which should be registered under s 53 of NRSWA, which includes some highway authority road works, and notifiable works are those which require notices under s 54, 55 and 57 of NRSWA, which are utility street works.

3.5.23.1.5 Bar holes

Bar holes are used to detect and monitor gas leaks. When bar holes are carried out and it is known that no further street works are required (such as when a gas leak is reported but none detected), a registration should be sent within 10 days, once final monitoring checks have been established. The bar holes will count as a single excavation and reinstatement for registration purposes.

An immediate (i.e. emergency) notice must be sent within two hours of the commencement of any other Registerable street works activity (i.e. excavation, or any other activity defined in 5.8.2) associated with the bar holes. In this latter case, these bar holes will not count as further excavations and reinstatements for the purposes of registrations.

All bar holes must be reinstated and registered when work on site is complete.

3.5.24 Raising a Notice from Maintenance Manager

Maintenance Manager allows 'Work Items' to be sent to the Street Works Register using the [TMA Interface] button on the Work Orders (Defects) – MAI3800 and Work Orders (Cyclic) – MAI3800A modules as shown below.

The [TMA Register] button will become active when the Register checkbox has been selected. Pressing this button will call the TMA Interface – MAI3990 form.

Figure 114 - TMA Interface button

Note: Street Works Manager by Exor MUST be implemented to send 'Work Items' to the Street Works Register.

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3.6 TMA Interface – MAI3990

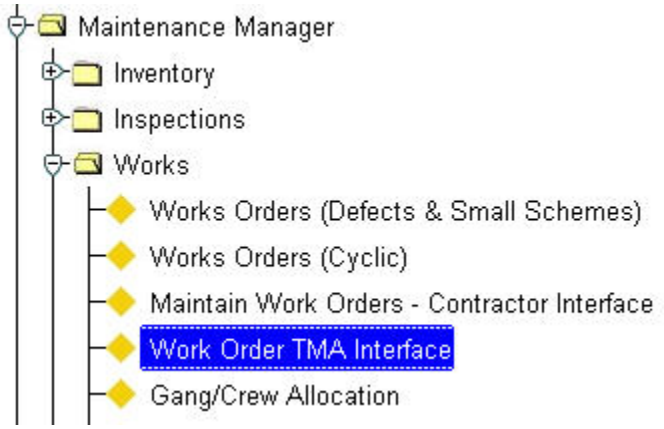

Figure 115 - TMA Interface Menu Option

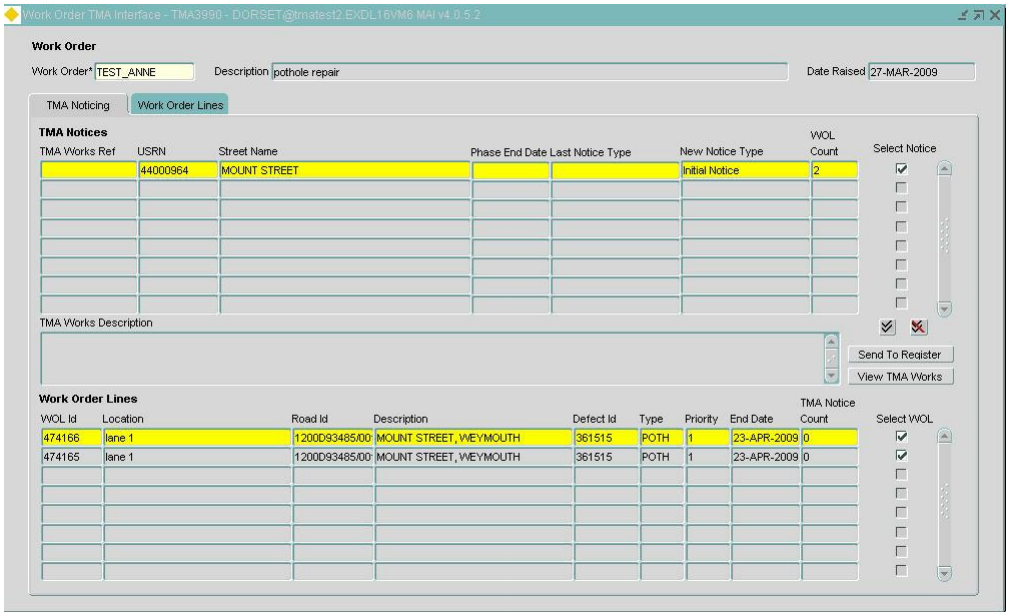

Figure 116 - TMA Interface

3.6.1 General Information

This module will allow the user to manage the notices that are to be generated for the work order lines in both Work Orders (Defect and Small Scheme) – MAI3800 and Work Orders (Cyclic) – MAI3800A.

The purpose of this module is:

- To automatically derive and associate one or more USRN's for each instructed, registered work order line. Multiple work order lines may be on one notice if those lines all fall on the same street. Multiple Notices may be generated for one work order line if that work order line spans a number of streets.

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- To facilitate the production of key TMA notice against each affected USRN throughout the life cycle of the works
- This module can be called in a number of ways:
- Using fastpath and the module Id – TMA3990
- By the selection of the [TMA Interface] button form within the Work Ordering Modules MAI3800 and MAI3800a
- Directly from the Menu as shown below, the user will have to query back the work order number required.

3.6.1.1 Roles

Each user that needs to use the Work Order TMA Interface will need a role assigned to give them access to Work Order (Defects) – MAI3800, Send Notice to Register – TMA1800 and TMA Interface –TMA3990

The module role TMA_USER that includes TMA1800 and TMA3990

is created as standard when TMA is implemented.

Users will therefore need the role of TMA_USER assigning. (Refer to your System Administrator to assign the appropriate role.)

3.6.1.2 User Organisation and District

Each user that needs to use the Work Order TMA Interface will need to have a default org/district assigned using Organisations and Districts – NSG0120. This default will be assigned to a works in Send Notice to Register – TMA1800. (Refer to your System Administrator to assign the appropriate organisation and district.)

3.6.2 TMA Noticing Tab

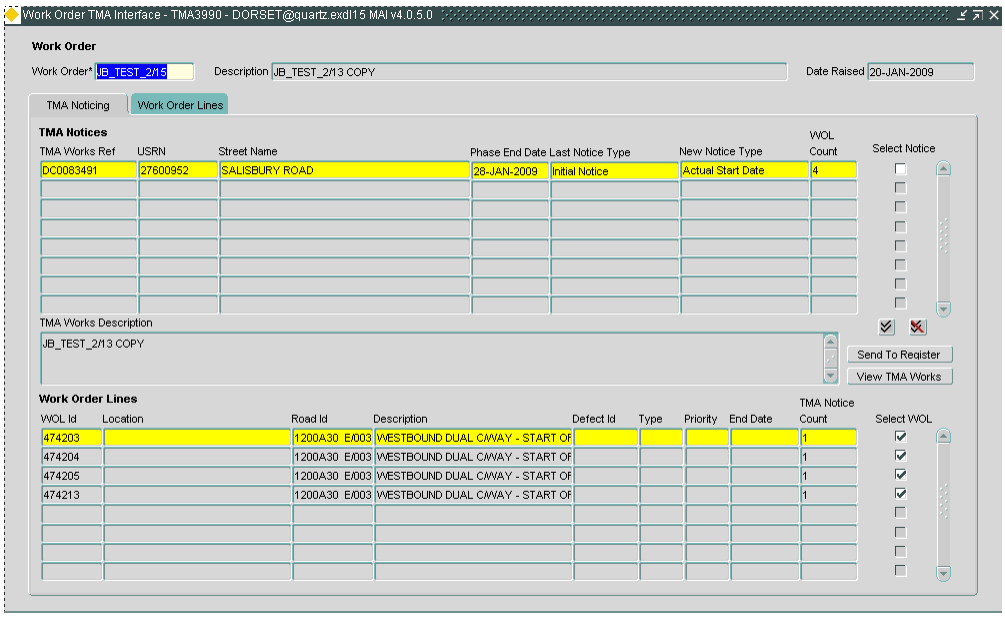

Figure 117 - TMA Noticing tab

These three fields will be automatically queried if form TMA Interface – TMA3990 is called from the Work Ordering modules. If called from the Menu the user will have to query back the required work order number.

- Work Order

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- Description
- Date Raised

TMA Works Ref ***(Display Only)***

When the notice has been sent to the TMA Register the Works reference will be displayed. This will be blank until the first notice is sent to the register.

USRN ***(Display Only)***

The USRN that has been derived against the work order line will be displayed:

- For defect clearance work order the USRN's will be derived based on the Road Section against the defect and the xy, measure available on the defect to find the accurate USRN.
- For small scheme and cyclic work orders USRN's will be derived based on the Road Section against the work order line.

There are cases when USRN cannot be determined for the Road Section. In such cases the Street field will be populated with Street cannot be determined for the Road Section and the Select Notice check box will be disabled. User will not be allowed to send any TMA Notice against the work order line.

Street Name ***(Display, Query)***

The Street Name for the derived USRN will be displayed.

Phase End Date ***(Display, Query)***

This is the TMA actual end date, if this is not available the estimated end date will be displayed.

Last Notice Type ***(Display, Query)***

The last notice type that has been sent from the list of notices displayed below will be displayed. For the available notices, see below:

Next Notice Type ***(Display, Query)***

The next notice from the available list of notices for the selected regime will be displayed. For the available notices, see below:

3.6.2.1 How the Notice Types are derived.

As requested by the user group only a subset of works notices will be processed from this interface. Other notice types will have to be manually entered using the TMA modules.

The noticing regime (Notice or Permit) will be derived from the street characteristics.

The following notice types may be used:

- 0200 – Initial Notice
- 0210 – PAA (Major)/Permit Application (Non-Major)
- 0300 – Confirmation Notice
- 0310 – Permit Application
- 0400 – Actual Start Date
- 0600 – Works Stop

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Once the noticing regime has been derived and a notice has been sent only notices relevant to the specific regime will be used.

WOL Count ***(Display Only)***

The number of work order lines associated with Notice will be displayed. A summary of the work order lines for this notice will be displayed in the work order lines area at the bottom of the window.

Select Notice ***(Checkbox)***

Select/Deselect the notice that is to be progressed.

The user now has two options for a selected notice

1. Select the [Send to Register] button to send the notice to Send Notice to Register – TMA1800. The system will send the 'Next Notice Type' notice. The user can then make changes and view errors and warnings prior to sending to the Register.
2. If a notice has already been sent they can select the [View TMA Works] button to view Works – TMA1000.

Select all and deselect all can be used to select the notices if required.

When the Checkbox is selected the following validation is carried out:

- If a notice is selected the system will search for all TMA Notices against the work order line and marks all notices associated with the work order line as selected.
- If a notice is selected that has multiple work order lines then all the notices against those work order lines will be selected.

TMA Works Description ***(Display Only)***

The Works Description that had been entered and edited using Send Notice to Register – TMA1800 will be displayed.

WOL Id ***(Display Only)***

The unique system generated work order line Id will be displayed.

Location ***(Display Only)***

The defect location will be displayed if the selected work order line is a defect clearance line.

Road Id ***(Display Only)***

The road id for the selected work order line will be displayed.

Description ***(Display Only)***

The road section description for the work order line will be displayed.

Defect Id ***(Display Only)***

For defect clearance work order lines the defect Id will be displayed.

Type ***(Display Only)***

For defect clearance work orders the defect type code will be displayed, for example POTH.

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Priority ***(Display Only)***

For a defect clearance work order the defect priority will be displayed, for example 2.1.

End Date ***(Display Only)***

For defect clearance work orders the Defect Due by date will be displayed. For small scheme and cyclic work orders the Target Date will be displayed.

TMA Notice Count ***(Display Only)***

The number of notices that this work order line is on will be displayed. Small scheme and Cyclic work order lines may span more that one USRN.

Select WOL ***(Checkbox)***

This Checkbox is used to include or exclude a work order line from the highlighted notice above. Default for the highlighted notice is to select the Checkbox.

When the Checkbox is unchecked the following validation is carried out:

- If it is the only WOL against the selected Notice and the WOL has only one Notice against it, if the check box gets deselected, the Select Notice check box becomes non selectable for this WOL so no notice can be generated.
- If it is not the only WOL against the selected Notice and the WOL has only one Notice against it then the check box gets deselected. The Select Notice checkbox remains checked for those work order lines that remain against the notice so the notices can be generated.
- If it is the only WOL against the Notice and the WOL has more than one Notices against it then, a warning is issued, WOL has more than 1 USRN's, deselecting this WOL will not create any notice against it. The check box get deselected and also deselects this WOL from other TMA Notices in the form and the Select Notice check box becomes non selectable for this WOL so no notice can be generated.

Show Map, when the user has highlights a notice in the top half of the form they may select the [Show Map] button to display the USRN that has been selected.

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3.6.3 Work Order Lines Tab

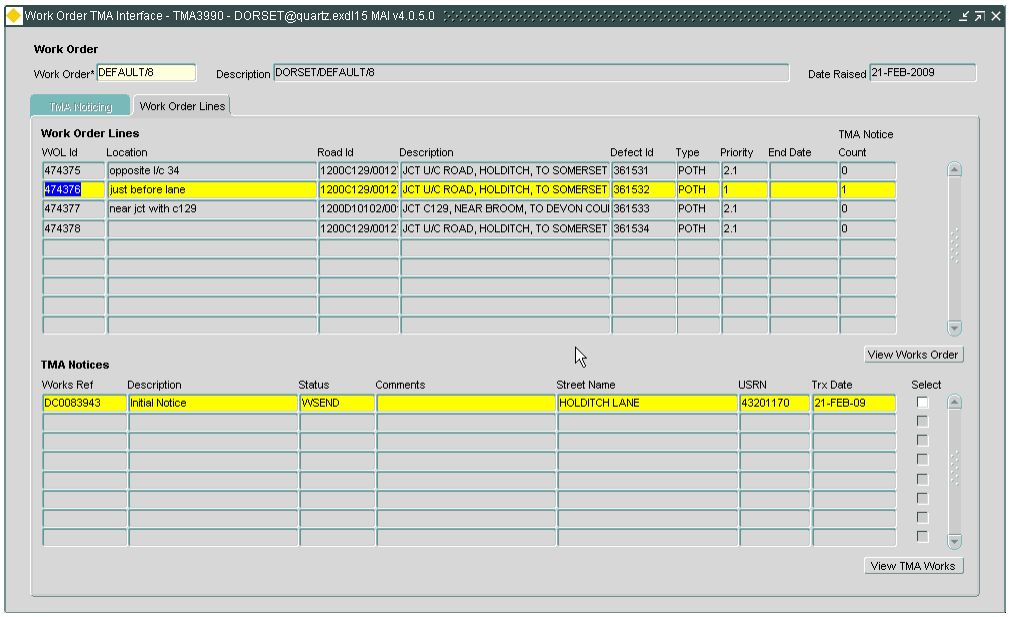
Work Order TMA Interface - TMA3990 - DORSET@quartz.exdl15 MAI v4.0.5.0
Work Order
Work Order* DEFAULT/8
Description DORSET/DEFAULT/8
Date Raised 21-FEB-2009
TMA Noticing
Work Order Lines
Work Order Lines
TMA Notice
WOL Id Location Road Id Description Defect Id Type Priority End Date Count
474375 opposite l/c 34 1200C129/0012 JCT U/C ROAD, HOLDITCH, TO SOMERSET 361531 POTH 2.1 0
474376 just before lane 1200C129/0012 JCT U/C ROAD, HOLDITCH, TO SOMERSET 361532 POTH 1 1
474377 near jct with c129 1200D10102/00 JCT C129, NEAR BROOM, TO DEVON COUI 361533 POTH 2.1 0
474378 1200C129/0012 JCT U/C ROAD, HOLDITCH, TO SOMERSET 361534 POTH 2.1 0
View Works Order
TMA Notices
Works Ref Description Status Comments Street Name USRN Trx Date Select
DC0083943 Initial Notice WSEND HOLDITCH LANE 43201170 21-FEB-09
View TMA Works

Figure 118 - Work Order Lines tab

This tab shows the information in the reverse way to that of the TMA Noticing tab.

If this module is called directly from the menu this will be the default tab the user will be presented with.

All of the fields within this tab are Display only with the exception of:

Select ***(Checkbox)***

This checkbox is selected followed by [View TMA Works] to take the user to Works – TMA1000 to display the works details for the selected notice.

[View Works Order] ***(Button)***

If this module has been called from the menu this will display Works Orders – MAI3800/MAI3800A.

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3.7 Send Notice to Register – TMA1800

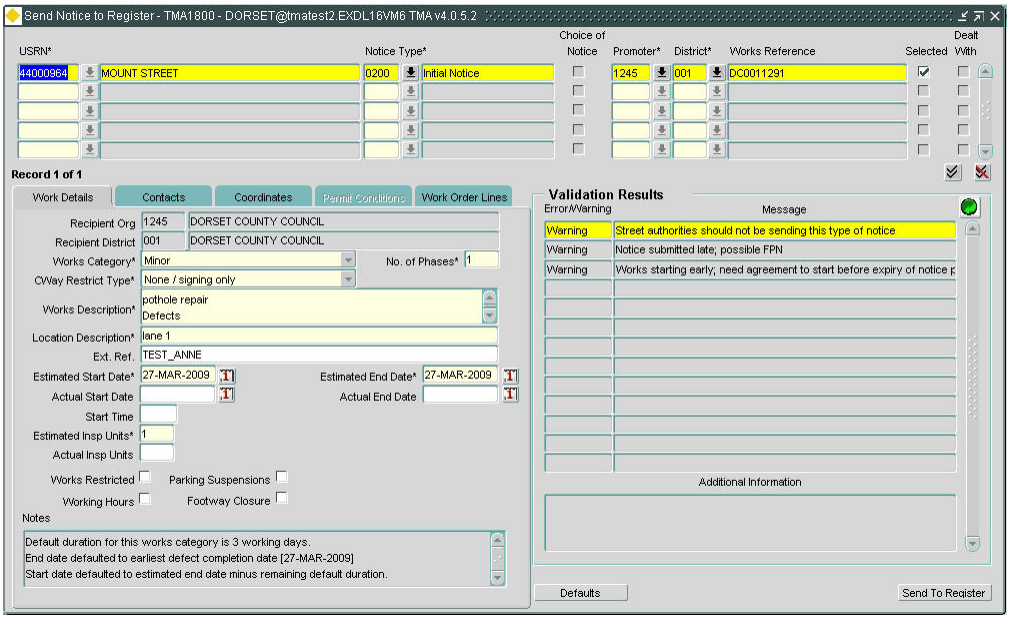

Figure 119 - Send Notice To Register

3.7.1 General Information

When the form is called from TMA Interface -TMA3990 it will automatically query back the details of the "candidate" notices that the user asked to be produced.

If no notices were selected in TMA Interface -TMA3990, then the message 'No records to process' will appear when the form starts. Once the alert box has been dismissed the form will exit and you will return to where you came from.

3.7.2 Upper Section

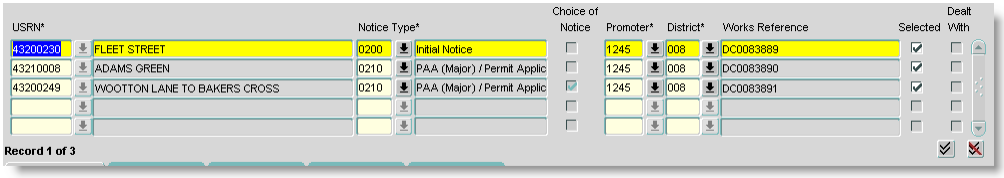

Figure 120 - Upper Section

This section of the form will display all the notices that were selected in Work Order TMA Interface – TMA3990.

USRN ***(Display Only)***

This will display the USRN and Street Name as selected in TMA Interface -TMA3990, when called from TMA3990 the street cannot be updated.

When Called from Enquiries – DOC0150 the street can be changed.

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Notice Type ***(Default, Update)*** ***List***

The notice type will default to the value displayed in TMA Interface -TMA3990. The list of values will present the relevant notice types (Notice or Permit) from the following:

- 0200-Initial Notice
- 0210-PAA (Major)/Permit Application (Non-Major)
- 0300-Confirmation Notice
- 0310-Permit Application
- 0400-Actual Start Date
- 0600-Works Stop

Choice of Notice ***(Checkbox)*** ***List***

This will be ticked if there is more than one notice type that can be sent. For example:

1. The street is on a permit and a NRSWA regime and an 0200/0210 needs to be picked
2. There is a choice between sending an 0300 or jumping straight to a 0400.

Promoter Org/District ***(Default, Update)*** ***List***

This will default to the current users org/district as defined in My Districts – NSG0130 . This can be updated if required.

Works Reference ***(Default)***

This will display the Work Order Number as selected in TMA Interface -TMA3990.

Selected ***(Checkbox)***

This will automatically be ticked unless another user is updating the record in the TMA. This will be selected followed by the [Send to Register] button to send the notices to the register.

This cannot be selected once the 'Dealt With' checkbox has been selected.

Dealt With ***(Checkbox)***

This will automatically be unticked unless another user is updating the record in the TMA. This will be checked automatically once the notice has been successfully sent to the register.

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3.7.3 Work Details tab

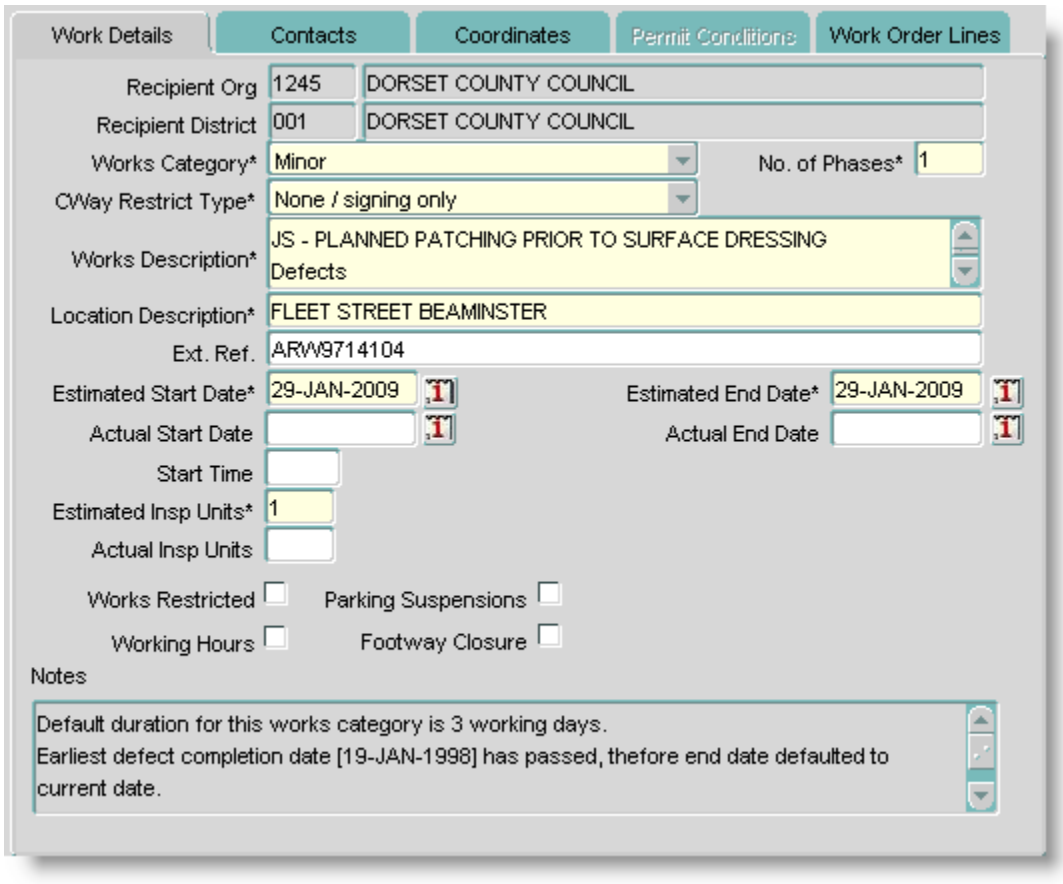

Figure 121 - Work Details tab

Recipient Org/Dist *(Display Only)*

This will display the primary recipient of the given notice type based on the USRN that the notice is for.

Note: For 0200 and 0210 notices the primary recipient of the notice is derived from the street ASD. If there are a number of interested parties in the street, copy recipients are identified and included on the notice but not shown on the form.

Note: For other notice types the primary and copy recipients of the opening 0200/0210 notice are identified and those are the ones included on the notice. As before, copy recipients may be included on the notice but not shown on the form.

Works Category *(Default)* *List*

For Initial notices this will display the default works category, as set up in the [Defaults] button. This can be amended if required. if changed it will update the estimated start date field.

For other notices it is the current value from the works/phase.

Number of Phases *(Default)*

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For Initial notices this will display the default value as set up in the [Defaults] button. This can be amended if required.
For other notices it is the current value from the works/phase.

Works Description (Default)

For Initial notices this will display the maintenance manager work order description then a list of all the defects associated with the relevant work order lines. This can be updated if required.
For other notices it is the current value from the works/phase.

Location Description (Default)

For Initial notices this will display the location of the first work order line with a location. This can be amended if required.
For other notices it is the current value from the works/phase.

Estimated Start Date (Default)

The estimated start date will be displayed. This can be updated.
The system will derive the estimated start date based on the following:

1. Get the earliest repair due date from the associated work order lines (defect clearance).
   - If this does not exist it will use the work order target completion date.
2. Work out what the default duration is for the category of works being noticed from metadata.
   An example is shown below:

Works Category	Default Duration
1-Major	20
2-Standard	10
3-Minor	3
4-Immediate - Urgent	1
5-Immediate - Emergency	1
98-Unattributable	1
99-Barholes	1

Figure 122 - TMA Notice period

3. Work out the TMA notice period for the category of works/notice type being produced
   For example:
   If we have a value for the target date
   If target date is today OR in the future then
   end date = target date
   start date = estimated end date minus the default duration. Ensure that start date cannot be < today.
   Else if that target date < today then
   estimated end date to today

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estimated start date to today

Else

start date = today

end date = start date plus the default duration.

Estimated End Date *(Default)*

This will default to the earliest start date for the individual work order lines or the target date for the work order. This can be updated.

Actual Start Date *(Default)*

For Initial notices this will be null. This can be updated.

For other notices it's the current value from the works/phase.

If that value is null and you've instructed TMA Interface – TMA3990 to send an Actual Start Notice then the value will get defaulted to the estimated start date.

Actual End Date *(Default)*

For Initial notices this will be null. This can be updated.

For other notices it's the current value from the works/phase.

If that value is null and you've instructed TMA Interface – TMA3990 to send an Actual Start Notice then the value will get defaulted to the estimated end date.

Estimated Insp. Units *(Default)*

For Initial notices this will display the default value, as set up in the [Defaults] button. This can be amended if required.

For other notices it is the current value from the works/phase.

Actual Insp. Units *(Default)*

For Initial notices this will default to null. This can be updated.

For other notices it is the current value from the works/phase.

Works Restricted

Working Hours

Parking Suspensions

Footway Closure *(Checkbox, Default)*

For Initial notices this will display the default value, as set up in the [Defaults] button. This can be amended if required.

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For other notices it is the current value from the works/phase.

Notes ***(Default)***

Populated with relevant details as to how the estimated start/end dates are derived when the form is invoked with the intention of sending an initial notice.

Can also contain a message about locking – should there be a locking issue.

Note: The notes do not change as you change attribution of block items i.e. they are static and a way of informing the end user how the original values on the record were derived.

3.7.4 Contacts tab

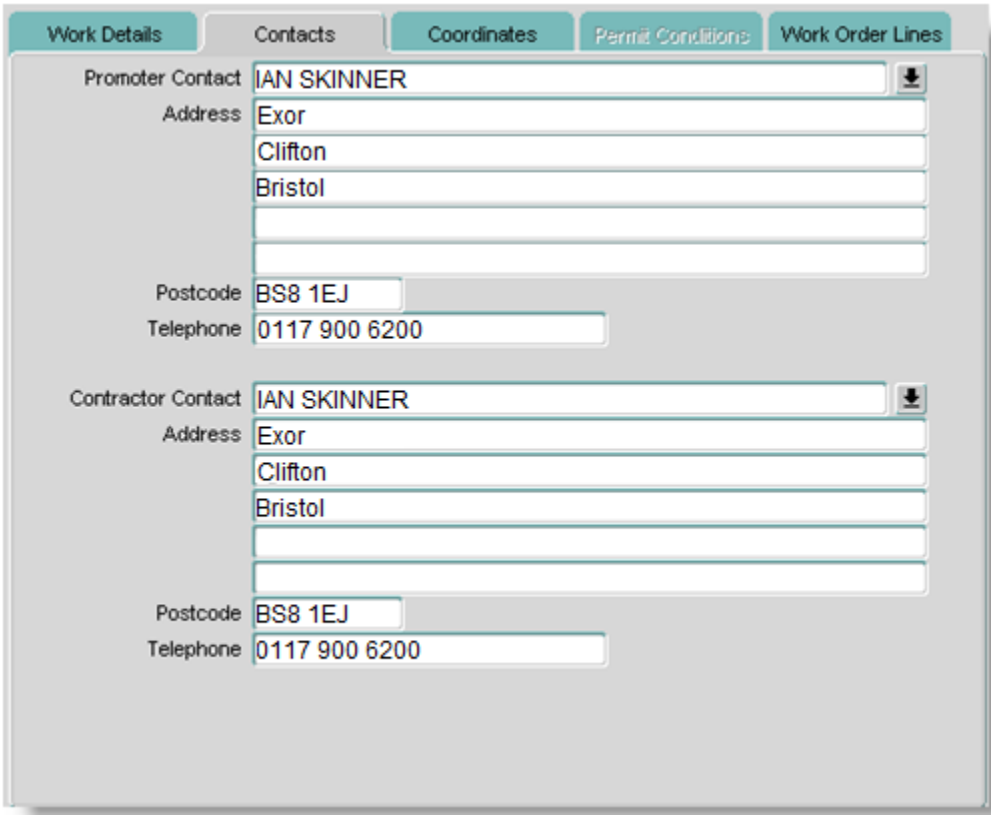

Figure 123 - Contacts tab

Promoter Contact ***(Default)***

For Initial notices this will display the default value, as set up in the [Defaults] button. This can be amended if required.

For other notices it is the current value from the works/phase.

Contractor Contact ***(Default)***

For Initial notices this will display the default value, as set up in the [Defaults] button. This can be amended if required.

For other notices it is the current value from the works/phase.

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3.7.5 Co-ordinates tab

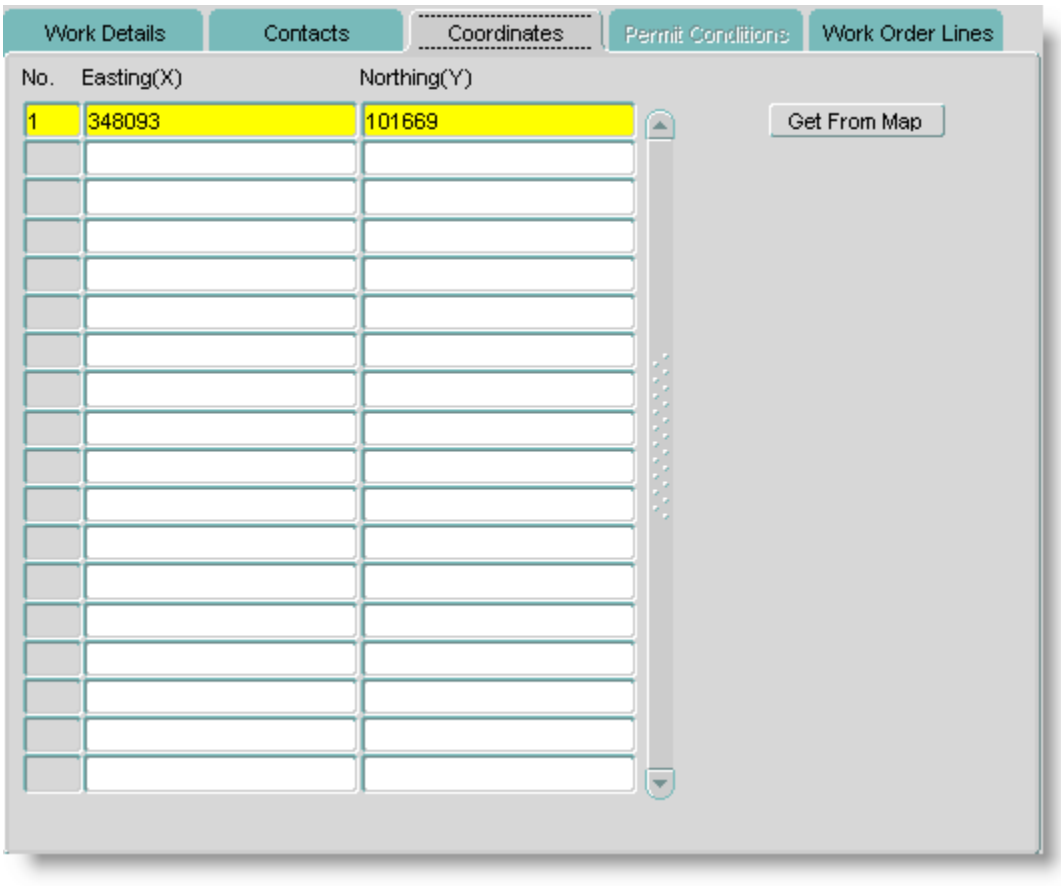

Figure 124 - Co-ordinates tab

Easting(X) and Northing(Y) (Default)

For Initial notices this default to the x/y value at the start of the street.

To update the co-ordinates do the following:

1. Select the [Get from Map] button, this will take you to Locator
2. Select send multiple point to application, digitise a new line, double click the mouse to end selection
3. This will return you to the form and display the new co-ordinates.

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3.7.6 Permit Conditions tab

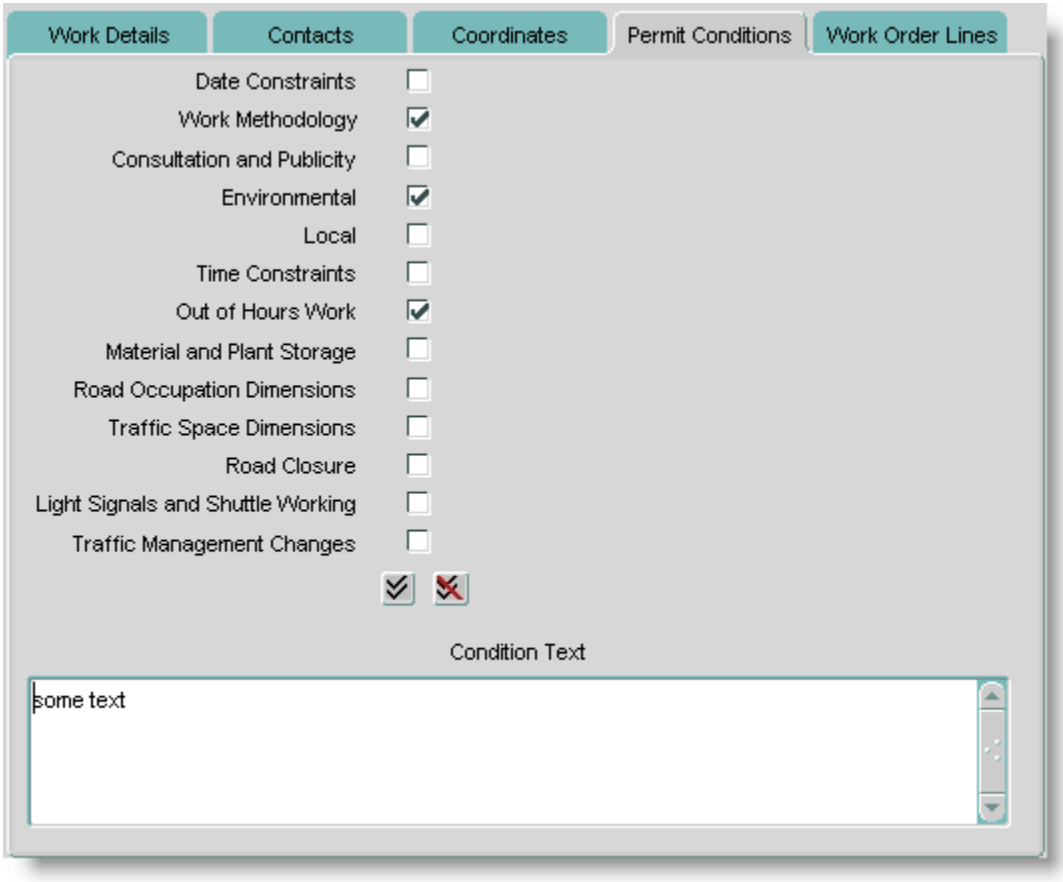

Figure 125 - Permit Conditions tab

On entering this tab, all checkboxes will be un-ticked and the condition text will be null.

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3.7.7 Work Order Lines tab

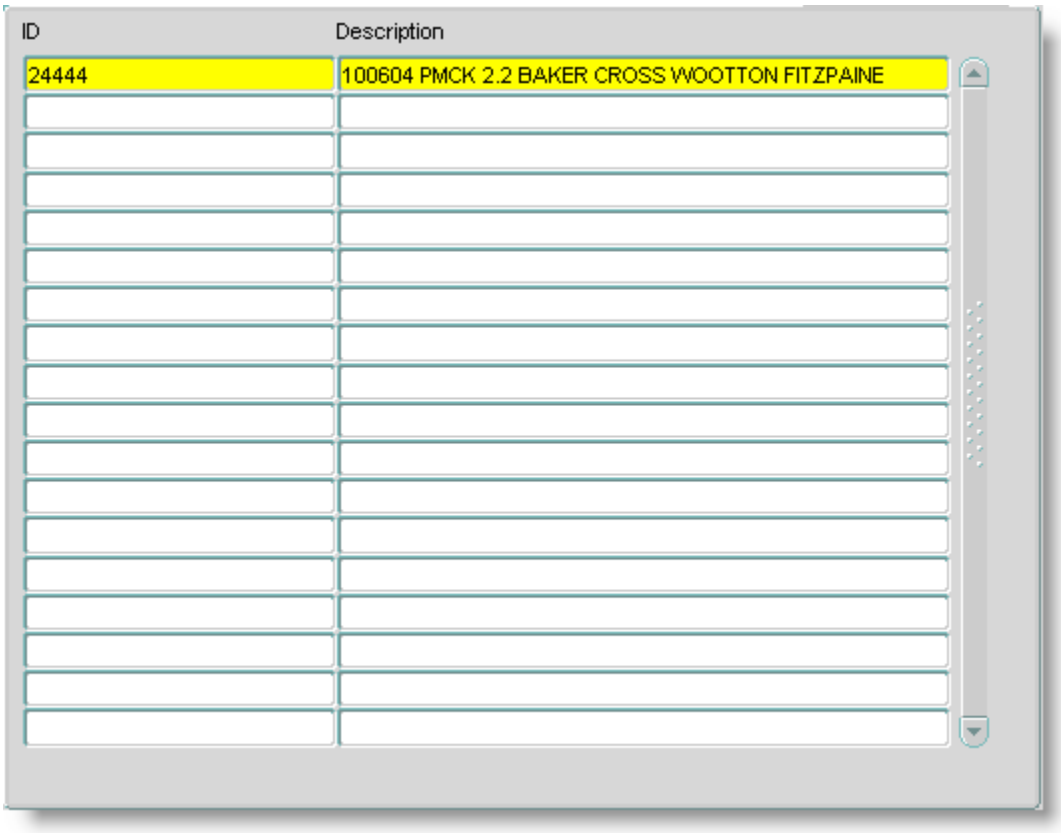

Figure 126 - Work Order Lines tab

Id ***(Display Only)***

This will display the unique system generated work order line Id.

Description ***(Display Only)***

This will display a concatenation of Defect Id, Defect Type, Priority and Location.

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3.7.8 Error Stack

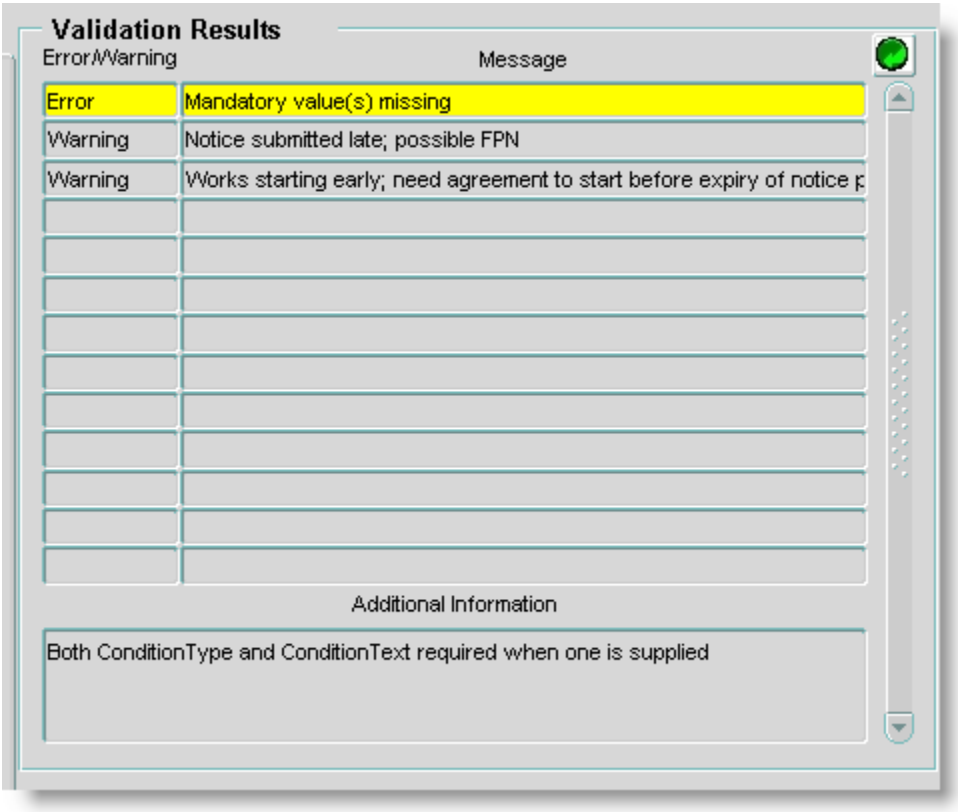

Figure 127 - Validation Results

This works in the same way as the error stack in TMA1001. This will display the errors and warnings for the selected notice. The highlights error will have a more descriptive text in the Additional Information window.

The errors and warnings are refreshed as the user moves from notice to notice or by the selection of the green refresh button.

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3.7.9 Defaults button

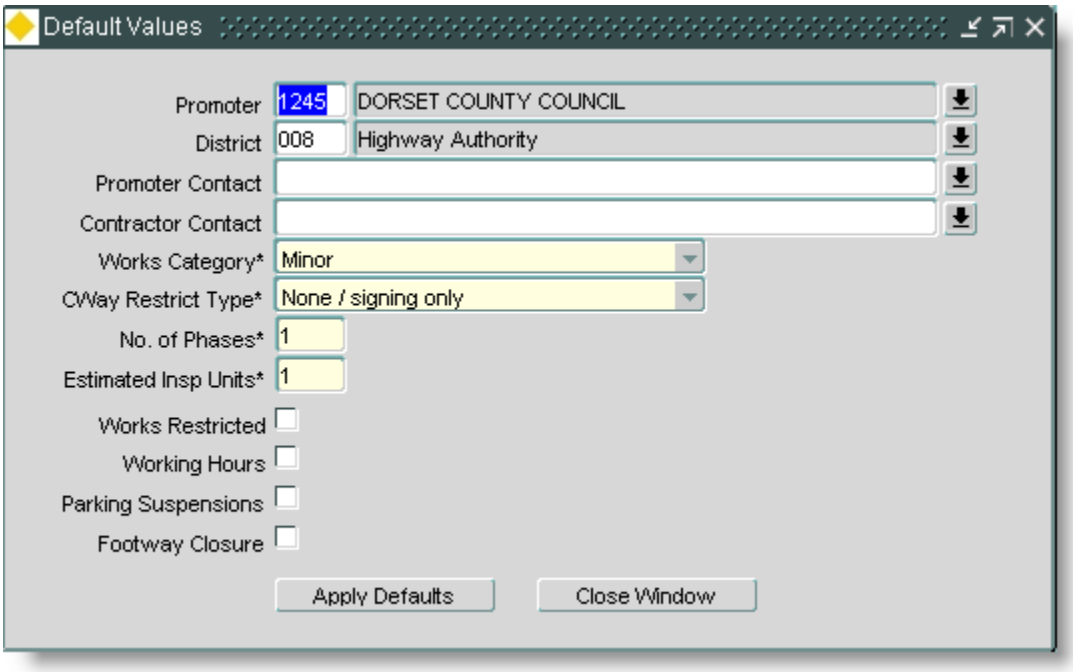

Figure 128 - Defaults button

The [Defaults] button will display the defaults window. These defaults are set for the selected set of notices in the current session. To permanently change the defaults for the system you will need to speak with Support because the following table will need updating – TMA_SEND_TO_REGISTER_GATEWAYS.

The [Apply Defaults] button will cycle through all the notice records selected and update the relevant attributes with the default values set.

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3.7.10 Send to Register button

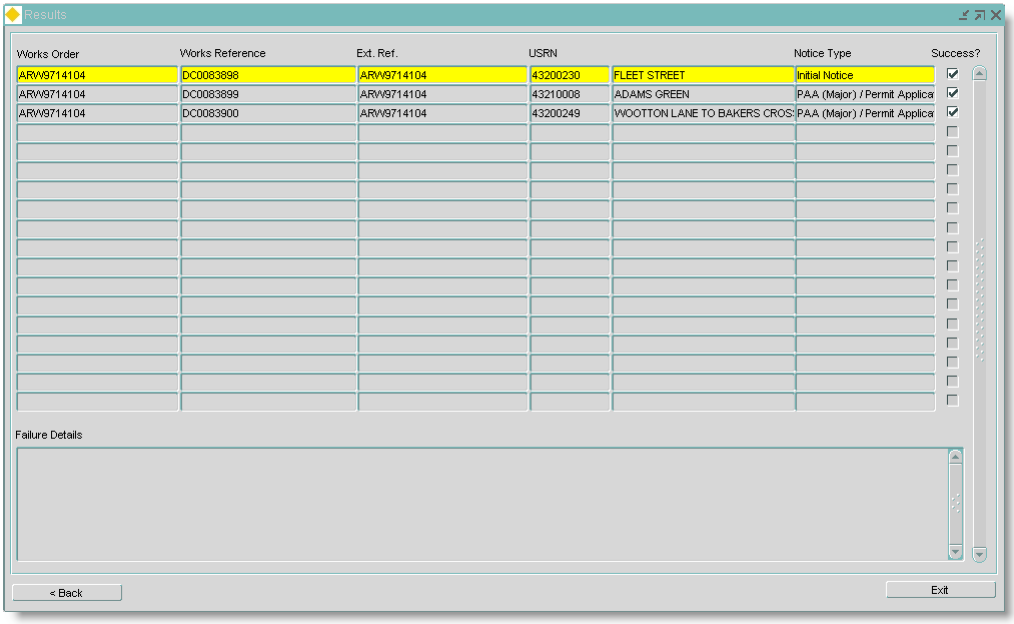

Figure 129 - Send to Register button

The Results window is displayed when the 'Send to Register' button is selected.

Each selected notice will have a record displayed showing whether or not the attempt at registration was successful.

When successfully registered the 'Dealt With' checkbox for the notice record is ticked so it cannot be re-noticed.

The [< Back] button takes you back to the main screen.

The [Exit] button will close the form and return you to TMA Interface -TMA3990.

When a Notice is raised from a works order the register checkbox will be ticked and the register status will be set to 'O – Outstanding' . The Street Works Notice can be viewed by pressing the [TMA Register] button (Figure 130).

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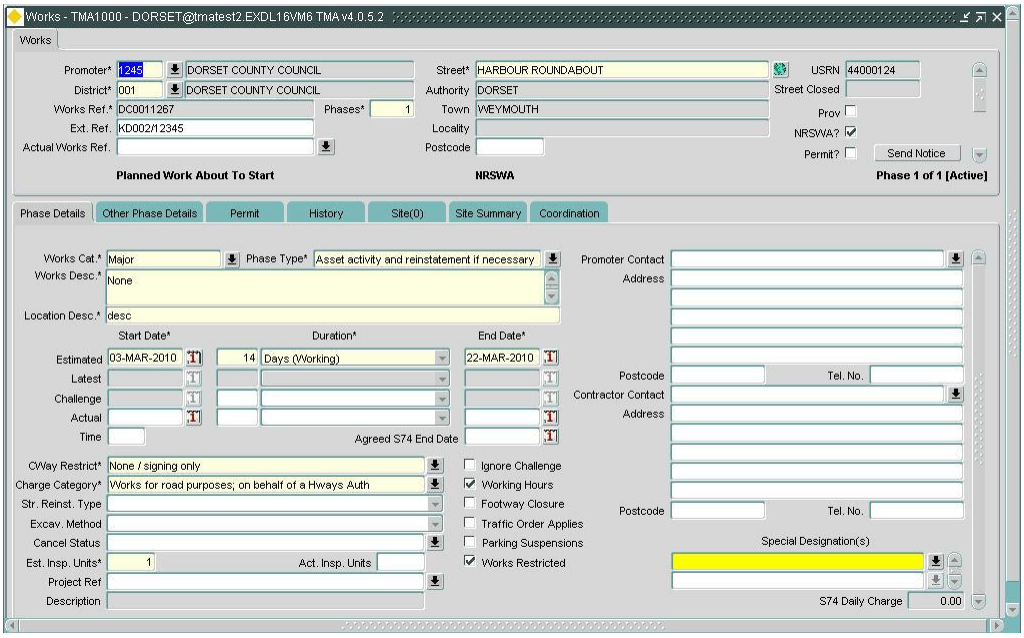

Figure 130 - TMA Notice

3.8 Works Order Authorisation – MAI3848

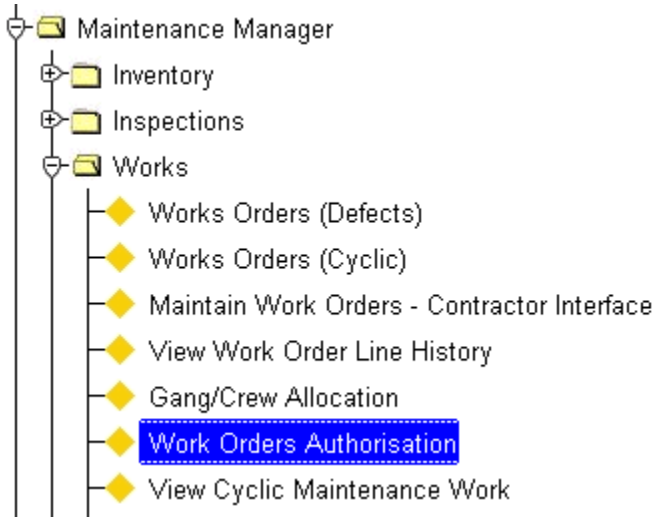

Figure 131 - Work Order Authorisation Menu Option

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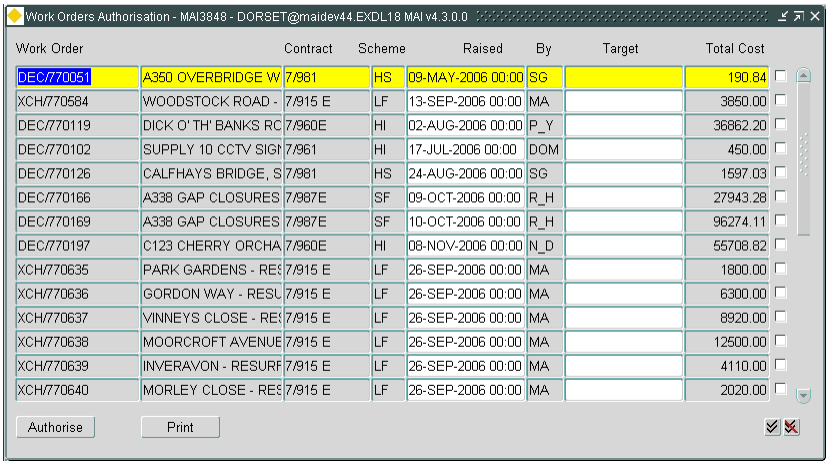
Work Orders Authorisation - MAI3848 - DORSET@maidev44.EXDL18 MAI v4.3.0.0
Work Order
Contract
Scheme
Raised
By
Target
Total Cost
DEC/770051 A350 OVERBRIDGE W 7/981 HS 09-MAY-2006 00:00 SG 190.84
XCH/770584 WOODSTOCK ROAD - 7/915 E LF 13-SEP-2006 00:00 MA 3850.00
DEC/770119 DICK O' TH' BANKS RC 7/960E HI 02-AUG-2006 00:00 P_Y 36862.20
DEC/770102 SUPPLY 10 CCTV SIGI 7/961 HI 17-JUL-2006 00:00 DOM 450.00
DEC/770126 CALFHAYS BRIDGE, S 7/981 HS 24-AUG-2006 00:00 SG 1597.03
DEC/770166 A338 GAP CLOSURES 7/987E SF 09-OCT-2006 00:00 R_H 27943.28
DEC/770169 A338 GAP CLOSURES 7/987E SF 10-OCT-2006 00:00 R_H 96274.11
DEC/770197 C123 CHERRY ORCHA 7/960E HI 08-NOV-2006 00:00 N_D 55708.82
XCH/770635 PARK GARDENS - RES 7/915 E LF 26-SEP-2006 00:00 MA 1800.00
XCH/770636 GORDON WAY - RESU 7/915 E LF 26-SEP-2006 00:00 MA 6300.00
XCH/770637 VINNEYS CLOSE - RES 7/915 E LF 26-SEP-2006 00:00 MA 8920.00
XCH/770638 MOORCROFT AVENUE 7/915 E LF 26-SEP-2006 00:00 MA 12500.00
XCH/770639 INVERAVON - RESURF 7/915 E LF 26-SEP-2006 00:00 MA 4110.00
XCH/770640 MORLEY CLOSE - RES 7/915 E LF 26-SEP-2006 00:00 MA 2020.00
Authorise
Print

Figure 132 - Work Order Authorisation

3.8.1 General Information

This form is used to authorise previously raised Works Orders. Only those Works Orders with a total cost within the Authorisation limits set for the current User in Users – HIG1832 will be displayed. If the User has no limits set, they may authorise any value of Works Order.

If the current User has also raised the Works Orders i.e. is the 'Originator', Product Option AUTH_OWN must be set to 'Y' in order for the same person to both Raise and Authorise a Works Order.

To view the details of a Works Order press the [Expand] button on the menu toolbar.

3.8.2 Works Order Authorisation

When you enter this form no Works Order details will be displayed. Press the [Execute Query] button to retrieve the Works Orders to be authorised.

Note: Only those Works Orders with a total cost within the Authorisation limits set for the current User in Users – HIG1832 will be displayed.

To select ALL of the Works Orders displayed press the Check All button. A tick will be displayed in the check box beside the Works Order Total Cost field. To deselect ALL Works Orders press the UnCheck All button.

To select individual Works Orders to be authorised click in the check box of the Works Order required. A tick will be displayed.

To authorise the selected Works Orders press the [Authorise] button.

3.8.3 Works Order Authorisation Worktray

The Work Order Authorisation Worktray is an Information Manager module that presents the user with a list of all the raised work orders that they are responsible for by geographical area and work category (budget). The user can choose to authorise and instruct a work order or forward it to another user's Worktray.

When in the Worktray, the user has all the standard functions available from within Information Manager for display of the data.

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In addition they can:

- Further restrict the data displayed by road group
- Drill to work order line and BOQ details
- Hover on the work order number to view work order line summary
- Drill from the work order number to the Navigator module to view all work order details
- View the work order location on a map
- View associated documents

An example of the Worktray showing 'hover' on the work order number is shown below

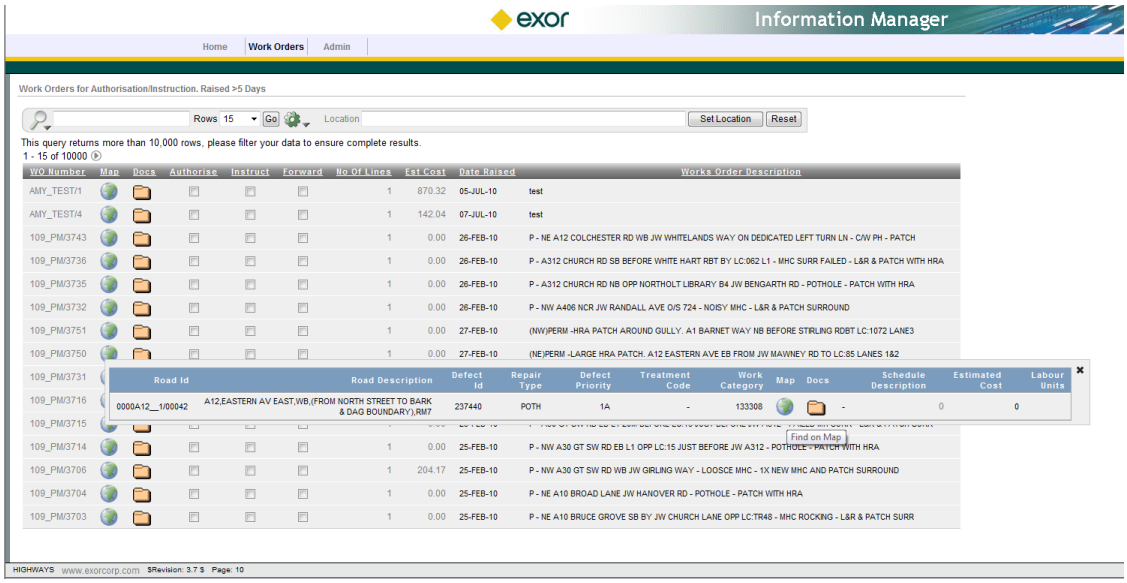

Figure 133 - Work Order Autorisation Worktray

Full details of the work order authorisation worktray can be found in the Information Manager User Guide.

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3.9 Other Works – MAI3800

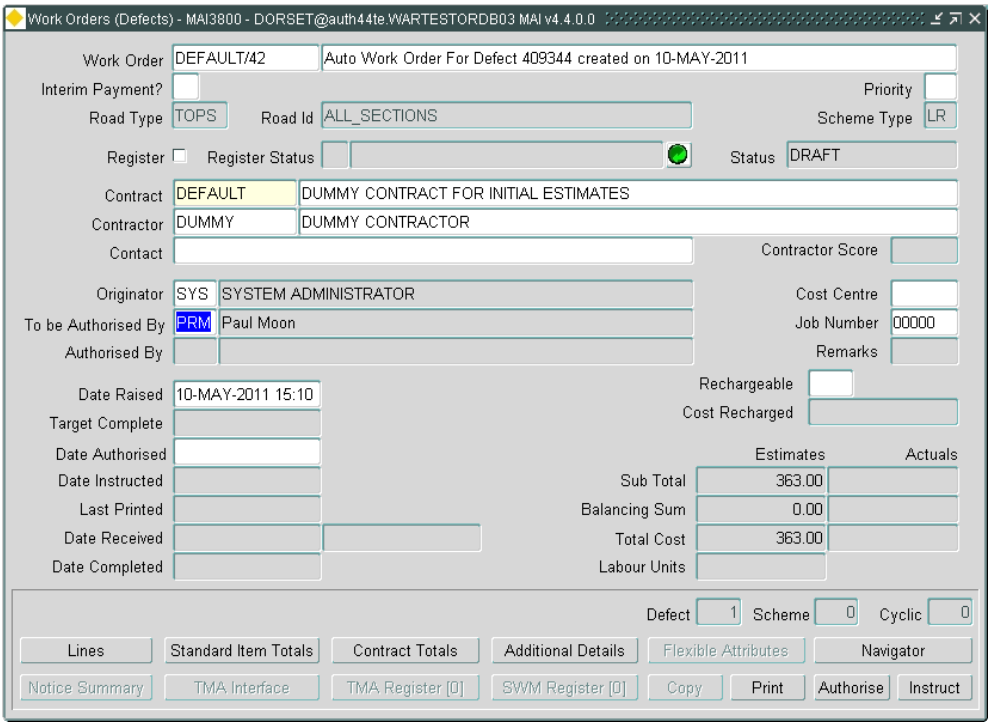

Figure 134 - Other Works

3.9.1 General Information

A works order can be created for any other type of highways related work that does not involve the previous collection of defects.

When raising an order of this type the same module is used as in raising a defect clearance works order but it is used in a slightly different way.

When creating an order for other work the user selects the road sections the work is to be carried out on followed by the BOQ items that will be used when carrying out the work. As this process is carried out, the various totals and sub-totals contained on the works order are updated instantly.

The Work Orders form offers you the facility to carry out ‘what if’ planning by constructing your works order, gradually adding and removing works order lines and schedule items until the totals match your budget before confirming the works order and forwarding it to the contractor.

Defect clearance works order lines can also be added to works orders of this type if required, this is covered in Works Orders (Defects).

[Copy] This will copy the entire work order including all work order lines and associated BOQ items, the following pop up window will be displayed allowing the user to copy the BOQ items and their associated estimated quantities or copy the BOQ items only without the estimated quantities.

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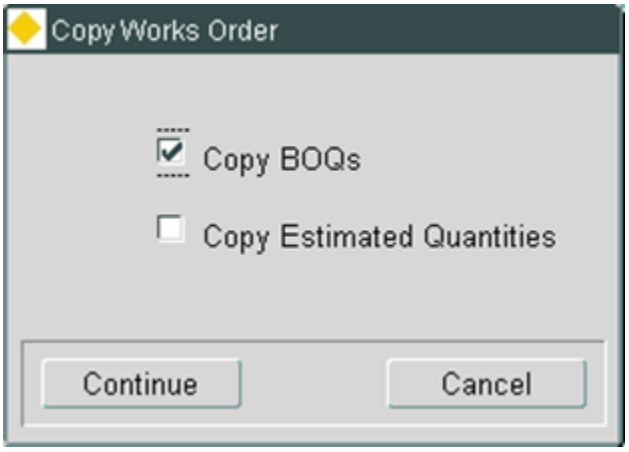

Figure 135 - Copy Works Order pop-up

[Continue] will create new copy of the Work Order or Work Order Line.

[Cancel] will return the user to the Work Order details with no changes made.

The [Copy] button is only available on a scheme type work order. If a copy is carried out on a work order that has combined defect and scheme lines only the scheme portion of the order is copied

A work order can be copied at any stage of its life cycle, the copied work order will be un-instructed awaiting modification.

The copy work order will have a new number in line with the work order numbering convention the description of the new work order will contain the number of the original order with the word 'COPY' appended.

Details are entered into the Work Order window in the same way as they are entered for defect clearance work orders, this is covered in detail in Works Orders (Defects).

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3.9.2 Work Order Lines

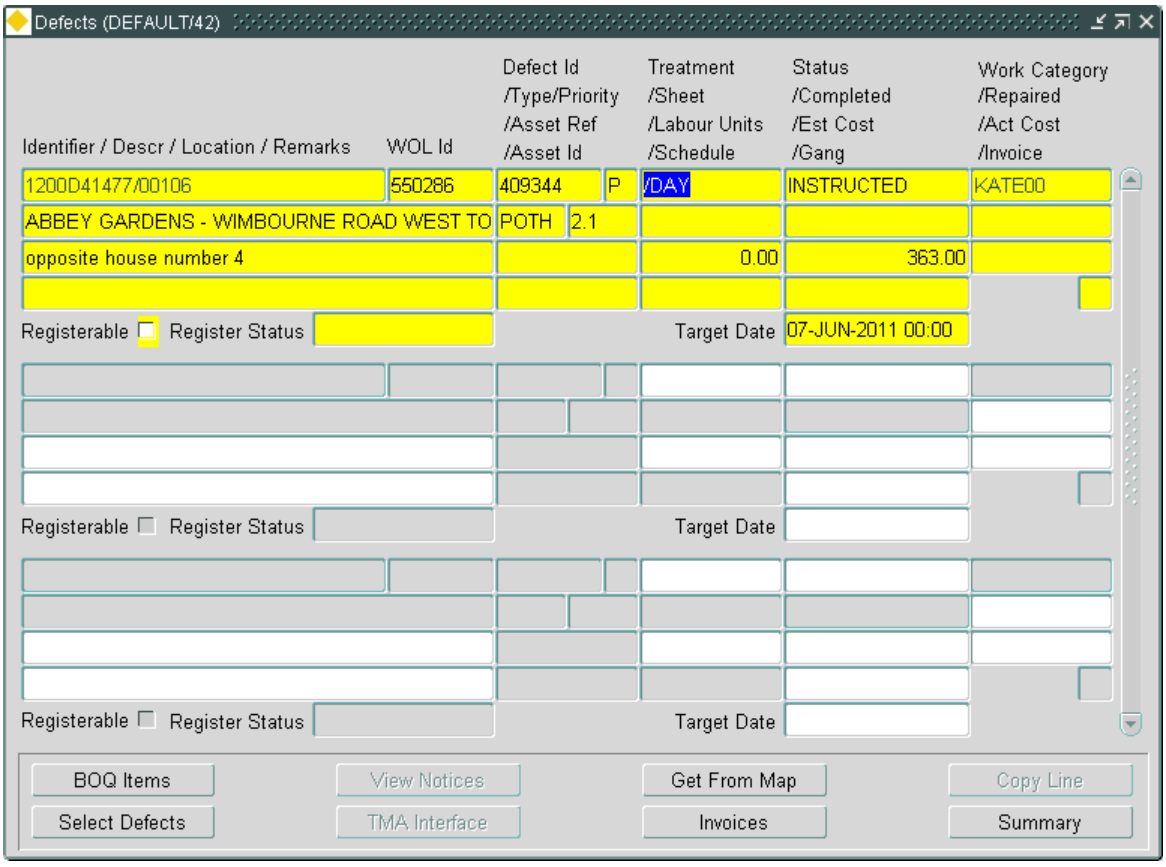

Figure 136 - Work Order Lines

This window is displayed when the [Lines] button is selected in the Works Orders window.

It contains details of each Works Order Line selected for inclusion on the Works Order. Initially all the lines will be blank, work order lines are added to this window following the procedure below.

If you want to remove a line from the Works Order, position the cursor on the appropriate line and press the [Delete Record] button in the toolbar. The line and its associated schedule items will then be removed from the Works Order.

Should you want to add further lines select the [Create Record] button in the toolbar and follow the procedure below again.

Once the Works Order has been instructed lines may not be added to the Works Order Lines, lines can however be removed from the Works Order any time before the order is completed by selecting [Delete Record].

[Copy Line] This will create a copy of the selected works order line and associated BOQ items,the following pop up window will be displayed allowing the user to copy the BOQ items and their associated estimated quantities or copy the BOQ items only without the estimated quantities.

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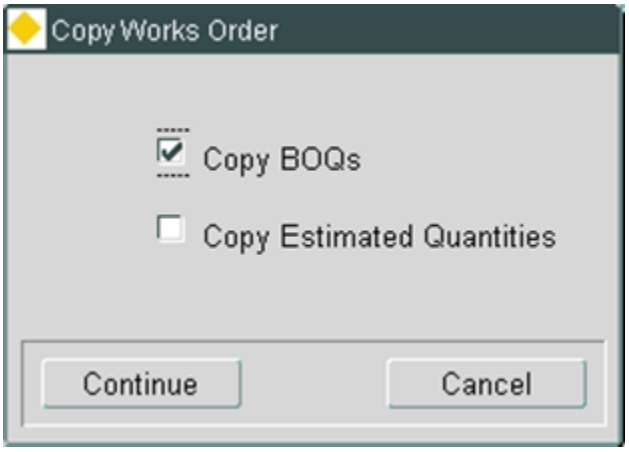

Figure 137 - Copy Works Order pop-up

[Continue] will create new copy of the Work Order or Work Order Line.

[Cancel] will return the user to the Work Order details with no changes made.

A work order line can only be copied if it a small scheme order.

3.9.3 Adding Other Work to an Order

The following procedure is used to add other work to a works order without the need to select defects, this facility allows the user to create a works order for any other work that needs to be carried out.

Double click the mouse in the Road Id field, this will display the gazetteer containing the road group selected in the Works Orders window. Only sections contained in this road group can be selected for inclusion on the works order.

1. Drill Down through the gazetteer and select the required road section.
2. Using the list of values enter the Work Category. Note that the current Budgetary position of the Work Category can be seen be double Clicking this field .
3. Enter any Remarks required.

Select the [BOQ Items] button and add the required schedule items.

From this point on raising, updating and completing an order for other work is the same as Works Orders (Defects). This includes full explanations of the fields in the remaining windows.

3.9.4 Completing Defects when Carrying out Other Work

If, due to the nature of the work carried out, the work on order has the effect of completing a number of defects that have been found as a result of inspections, these defects will need completing to keep your records up to date. There are two methods of doing this, they are as follows:

Manually.

Defects can be manually completed using the procedure described in Manually Completing a Defect in this guide.

Automatically.

The relevant defects can be added as additional work order lines in the current 'other work' works order in the same way as they are added to a defect clearance works order Works Orders (Defects).

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Once the defects are on the order they can each have a single rogue item with a zero rate and hence a zero cost associated with them.

Therefore when the works order is completed all the defects will be completed without affecting the cost of the order.

3.10 Non Highways Related Works

The Works Ordering system references your road network when raising works orders. However there are occasions where you will wish to raise a works order to carry out some work on a part of your organisation that is not related to the network, examples of this are depot work, grounds maintenance and vehicle maintenance.

The following procedure details a method of raising a works order with the use of dummy sections, each section may be used to represent one of your Depots.

3.10.1 Creating Dummy Sections

It is important that prior to adding dummy sections to your road network that you first discuss the implications of doing so with your Network Manager or Systems Administrator, you may wish to discuss numbering and naming conventions so you do not accidentally use the dummy network for anything other that it was intended.

The following procedure details a method of creating dummy sections for use in works ordering, additional road group types, road groups and gazetteer entries can be made if required.

Each road section starts and ends with a Node, a new dummy node will need to be created for use with the dummy sections. This is carried out using Nodes – NM0101.

Create a new dummy section, give the link and section meaningful descriptions. This is carried out using Elements – NM0105.

Create a new road group of type TOP, this will ensure the new sections can be accessed through the gazetteer, add the new sections to that group. This is carried out using Groups of Sections – NM0110.

A works order can now be raised against the new TOP group defined above.

Other work can now be added to the order.

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3.11 Works Orders – Contractor Interface – MAI3802

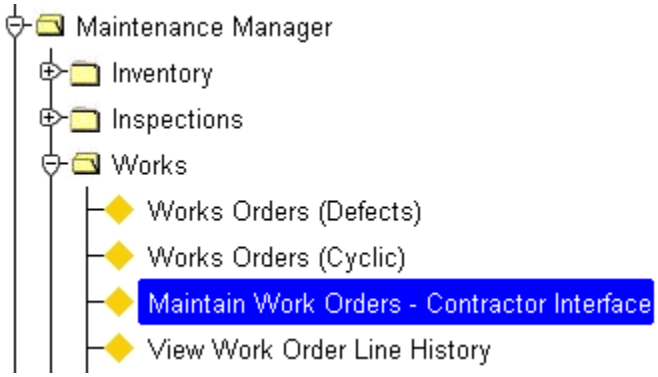

Figure 138 - Works Ordersn(Contractor) Menu Option

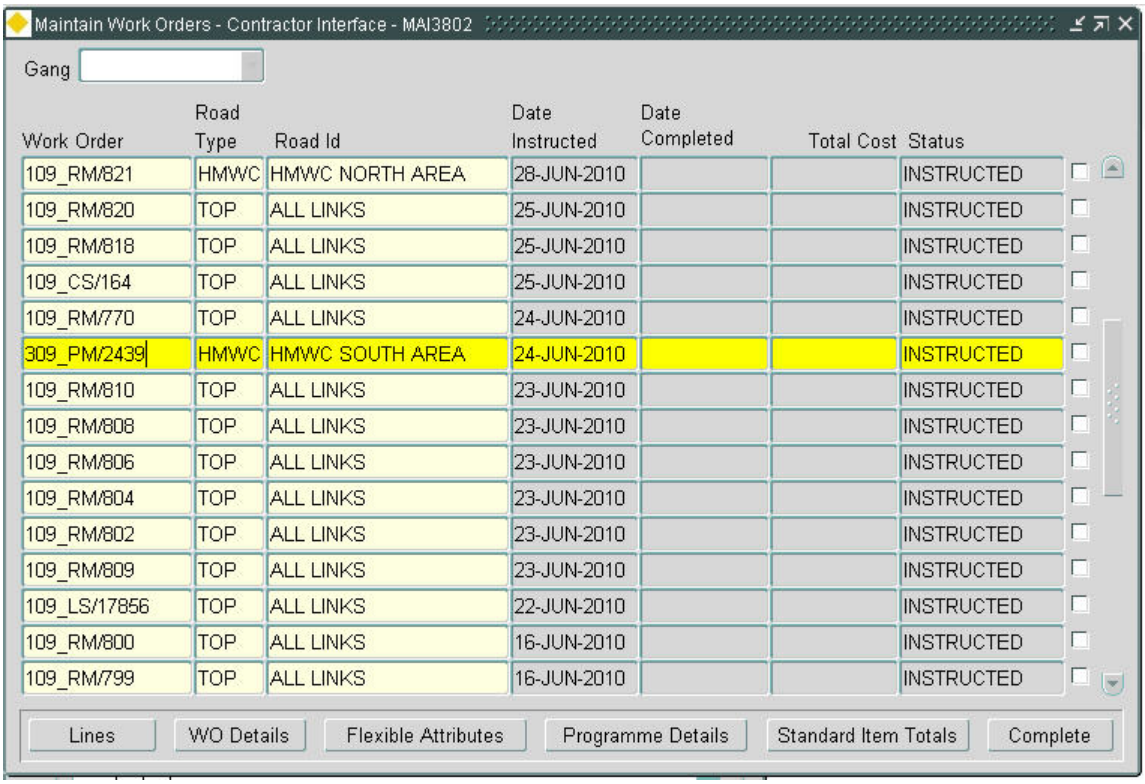
Maintain Work Orders - Contractor Interface - MAI3802
Gang
Work Order
Road Type
Road Id
Date Instructed
Date Completed
Total Cost
Status
109_RM/821 HMWC HMWC NORTH AREA 28-JUN-2010 INSTRUCTED
109_RM/820 TOP ALL LINKS 25-JUN-2010 INSTRUCTED
109_RM/818 TOP ALL LINKS 25-JUN-2010 INSTRUCTED
109_CS/164 TOP ALL LINKS 25-JUN-2010 INSTRUCTED
109_RM/770 TOP ALL LINKS 24-JUN-2010 INSTRUCTED
309_PM/2439 HMWC HMWC SOUTH AREA 24-JUN-2010 INSTRUCTED
109_RM/810 TOP ALL LINKS 23-JUN-2010 INSTRUCTED
109_RM/808 TOP ALL LINKS 23-JUN-2010 INSTRUCTED
109_RM/806 TOP ALL LINKS 23-JUN-2010 INSTRUCTED
109_RM/804 TOP ALL LINKS 23-JUN-2010 INSTRUCTED
109_RM/802 TOP ALL LINKS 23-JUN-2010 INSTRUCTED
109_RM/809 TOP ALL LINKS 23-JUN-2010 INSTRUCTED
109_LS/17856 TOP ALL LINKS 22-JUN-2010 INSTRUCTED
109_RM/800 TOP ALL LINKS 16-JUN-2010 INSTRUCTED
109_RM/799 TOP ALL LINKS 16-JUN-2010 INSTRUCTED
Lines
WO Details
Flexible Attributes
Programme Details
Standard Item Totals
Complete

Figure 139 - Contractor Interface

3.11.1 General Information

This form is designed to allow the contractor to log on to the system, enter the actual values of the repair and complete the works orders that have been issued.

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Works Orders can be built up over a period of time, therefore Works Orders will only be visible in this window under the following conditions:

- The works order has been authorised by entering initials in the Authorised by field.
- The works order has been instructed by entering a date in the Date Instructed field.

3.11.2 Work Orders

When you enter this window there will be no orders visible, select [Execute Query] to retrieve all available orders.

To print the selected Works Order select the [Print] button in the menu toolbar.

To view additional information on the selected works order select the [Expand] button on the toolbar.

Gang ***(Display Only)*** ***List***

This allows the selection work that has been assigned to an individual gang. This is only available in query mode when the GANGENABLE product option is set to 'Y'

Work Order ***(Display Only)*** ***List***

The work order numbers will be displayed. List is available in query mode only.

Road Type ***(Display Only)***

The road type will be displayed.

Road Id ***(Display Only)***

The road Id will be displayed.

Date Instructed ***(Display Only)***

The date the order was instructed will be displayed.

Date Completed ***(Display Only)***

When the works order is completed the date complete will be displayed. When querying back works orders, this field can be used to query back all orders that have not been completed using the query where facility using the following procedure:

- Select [Enter Query], enter :a in the Date Completed field.
- Select [Execute Query], the query where window will be displayed.
- Enter : a is null into the query where window.
- Select [Execute Query] again to retrieve all works orders without a date completed.

Total Cost ***(Display Only)***

The total actual cost of the completed works order will be displayed.

Status ***(Display Only)***

The status of the order will be displayed.

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As the works order line passes through the payments cycle the status will be updated automatically. If a works order has a combination of lines that have been paid with some being unpaid the status will be PART PAID.

Checkbox ***(Optional)***

When checked this will display the date, time and user Id in the 'Date received' field in MAI3800 allowing the contractor to indicate that they have received and are working on the selected work order.

A number of buttons have been defined on this window for use when completing a works order, they are as follows:

[Lines] Opens the defects window and allows the user to add works order lines. This window is also common to both other works and cyclic maintenance works orders. (Figure 140)

[WO Detail] Opens the defects window enabling the contractor user to complete individual lines on the selected works order. (Figure 144)

[Flexible Attributes] Opens the maintain flexible attributes window, attribute values can be added if required. (Figure 145)

[Programme Details] Displays the programme details window. (Figure 146)

[Standard Item Totals] Displays the standard item totals window and shows the estimated and actual costs and quantities for each standard item in the works order. (Figure 147)

[Complete] Completes all works order lines on the selected order, once this button has been selected and the date entered, no changes can be made to the works order. To make changes to the actual BOQ amounts works order lines should be completed individually.

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3.11.3 Work Order Lines

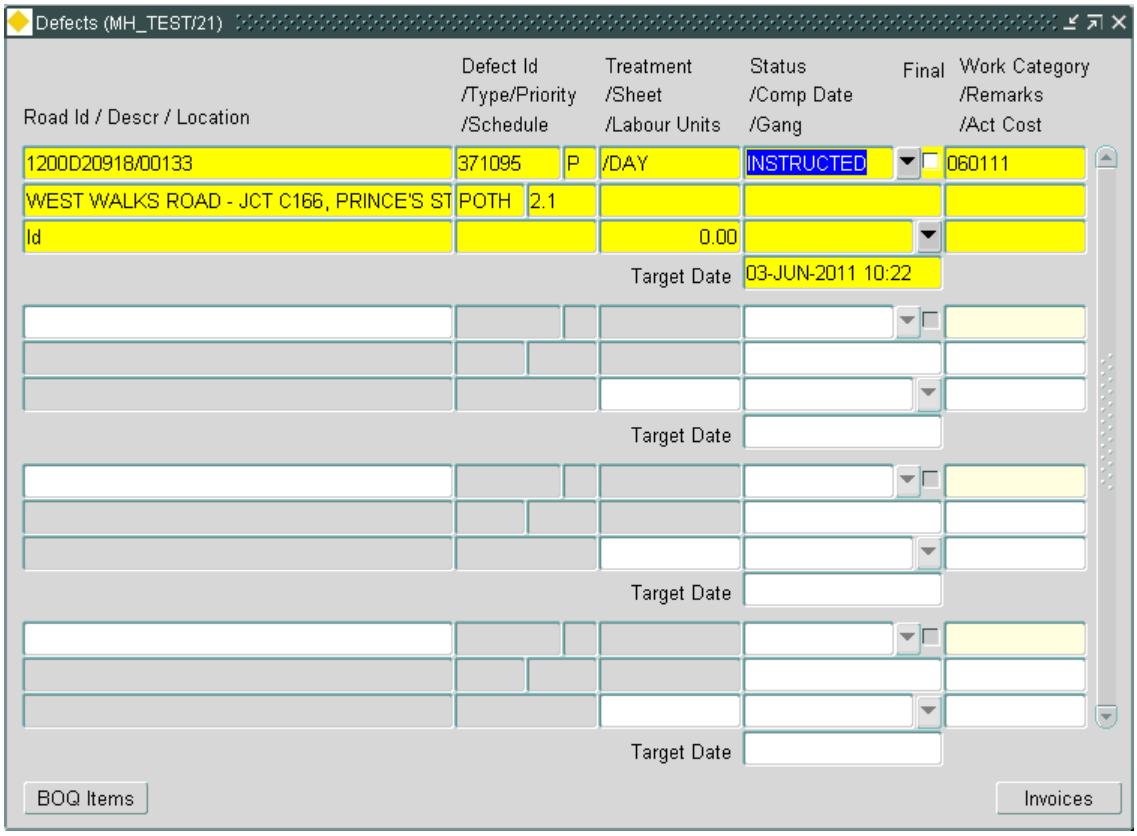

Figure 140 - Work Order Lines

This window is displayed when the [Lines] button is selected in the Works Orders (Contractor) window.

It shows each works order line on the selected works order, if the order contains defects, full details of the defect can be viewed by pressing the [Expand] button in the toolbar, this will display Defects – MAI3806.

This window contains a line for each works order line. Works order lines cannot be added or removed from this window.

Each works order line displays a summary of the defect information, the majority of the fields are display only.

Road Id ***(Display Only)***

Displays the road Id where this defect is located.

Descr ***(Display Only)***

Displays the full name of the road section.

Location ***(Display Only)***

Displays the text describing the location of the defect.

Defect Id ***(Display Only)***

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Displays the unique defect reference number for the defect.

Defect Type ***(Display Only)***

Displays the code representing the type of defect.

Defect Priority ***(Display Only)***

Displays the priority code for the current defect.

Schedule ***(Display Only)***

This field will display the cyclic maintenance schedule name.

Treatment ***(Display Only)***

If required, select a treatment code to rectify the current defect.

Sheet ***(Display Only)***

The defects work sheet number will be displayed.

Labour Units ***(Display Only)***

Displays the number of labour units estimated to rectify this defect. This is derived from the contract under which this works order is being raised

Status ***(Required)*** ***List***

Displays the current status of the works order line.

Initially a works order line will have a status of DRAFT.

Once the work order has been instructed and saved the work order line will become INSTRUCTED.

This status will change to COMPLETED in one of two ways, they are as follows:

1. Select the [Complete] button on the initial window, this will not allow the update of BOQ items.
2. Change the status of the works order line to COMPLETED.
    - Enter the completed date.
    - Update the dimensions in the BOQ Items window to the actual dimensions
    - Add any further BOQ items if required.
    - Save the changes

Once the changes have been saved no further changes can be made to that works order line or its BOQ items.

The following button has been defined on this window for use when completing a works order:

[BOQ Items] Opens the BOQ Items window where BOQ items can be added to or modified on the selected works order line.

As the works order line passes through the payments cycle the status will be updated automatically.

The product option STATVAL controls the contents of the list of values, if it is set to ‘Y’, ACTIONED can be selected from the list of values.

Also if set to Y and the current status is ACTIONED, UNAPPROVED, INTERIM, or PART PAID then the status can be changed to VALUATION.

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Comp Date ***(Required)***

If the status is changed to completed the completion date of the works order line must be entered.

Gang ***(Optional)*** ***List***

Enter the Gang that was use to carry out the work.

Gangs are enabled by setting the Product Option GANGENABLE to 'Y'

The list of values is maintained in Domains – HIG9120 and update the GANG domain

Work Cat ***(Display Only)***

The work category for the selected defect will be displayed.

Remarks ***(Display Only)*** ***Edit***

Enter any remarks regarding the works order line will be displayed.

Act Cost ***(Display Only)***

This field will display the actual cost of repairing this defect. As the actual cost is only known once the defect has been repaired and the status updated to COMPLETED or PART PAID in the case of an Interim payment, this field will initially be blank.

Target Date ***(Display Only)***

This field will display the target date and time for the work order line. The date and time displayed here will depend on how the system administrator has set the system to behave with regard to target dates. See the target date for work order lines (Figure 96).

For information on making an Interim Payment refer to the section Completing a Works Order Line with an Interim Payment, above.

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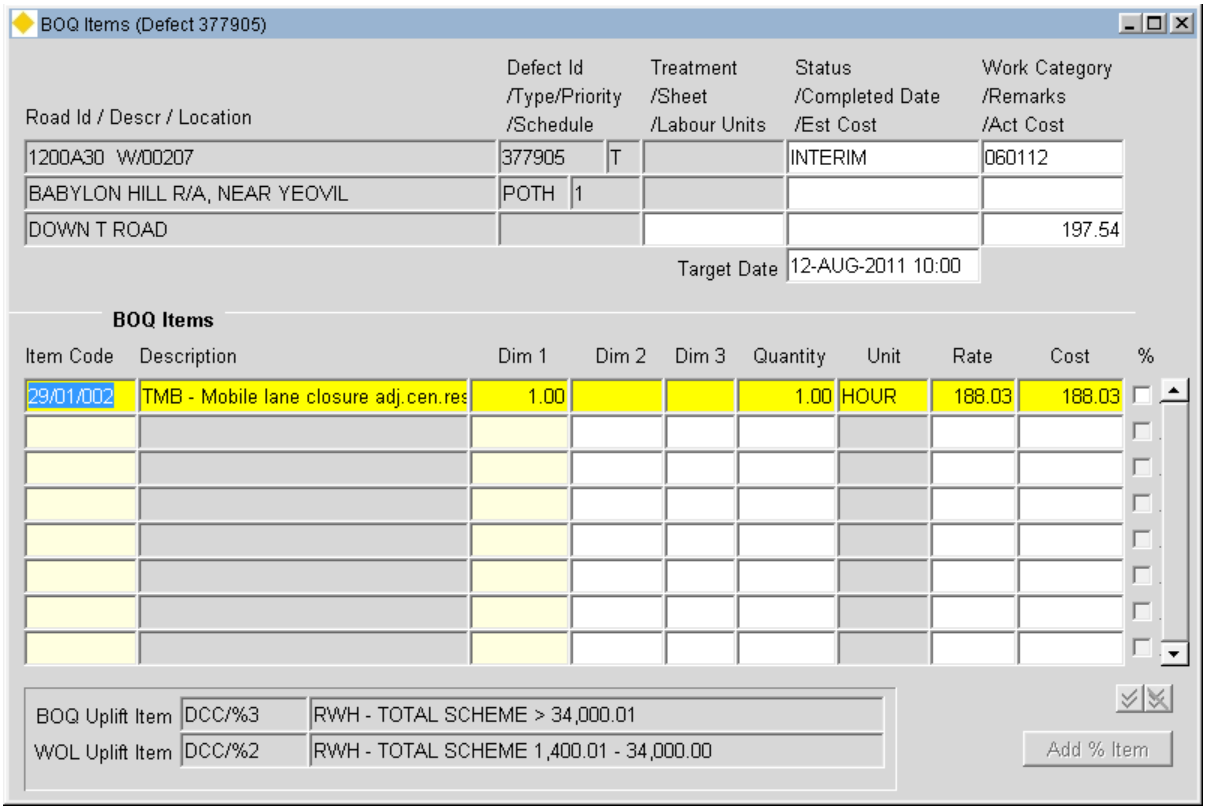

Figure 141 - BOQ Items

3.11.4 BOQ Items

This window is displayed when the [BOQ Items] button is pressed in the Work Order Lines window.

The BOQ items cannot be changed to reflect the actual values until the status of the line has been updated to COMPLETED and the completed date added or in the case of an Interim Payment, the status code is changed to VALUATION.

For information on making an Interim Payment on a Works Order Line refer to the section Completing a Works Order Line with an Interim Payment, above.

Should you want to add further items, press the [Create Record] button in the toolbar. This will enable you to add a new item.

Note:

1. To avoid problems the [Save] button should be used when each BOQ item has been added.
2. Once the work order has been instructed, if the wrong BOQ has been entered or the band has changed prior to the entry of the actual values the incorrect BOQ item should be zeroed (it cannot be deleted as it has been used in the definition of the estimated values) before entering the correct item.

For information on adding a Percentage Item to a BOQ refer to the section Adding a Percentage Item – Page 109, above.

Item Code (Required) List

Select a valid standard job item to represent a task to be carried out.

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Any items added must exist on the selected contract.

Description ***(Display Only)***

Displays the description of the standard job item.

Dim 1/Dim2/Dim3 ***(Required or Optional)***

Each standard job item can have one or more dimensions associated with it, depending on the nature of the work represented by the job item. For example, replacing damaged kerbing will have a single dimension representing the length of kerbing to be replaced, whilst filling a pothole may have three dimensions representing the length, width and depth of the pothole to be filled. Consequently, these three dimension fields are Required or Optional according to the needs of the job in question.

Note that the message line will display a message explaining what unit of measurement should be used for each dimension field. This message will be of the form 'Enter the Length'.

Quantity ***(Display Only)***

Displays the calculated quantity of work based on the dimensions supplied in the previous fields. The unit of this field is displayed in the Unit field described below.

Unit ***(Display Only)***

Displays the unit of measurement of this job item. This unit relates to the Total Qty field described above.

Rate ***(Display Only)***

Displays the rate per unit for this work item as held on the contract under which this works order is being created

Cost ***(Display Only)***

The actual cost will be displayed.

Additional BOQ details can be viewed for each item by selecting the [Expand] button from the toolbar.

% ***(Check Box)***

If this item is to attract a percentage increase or decrease using a Percentage Item tick this box. Note that only Standard Job Items which have the 'Allow Percentage Flag?' flag set to 'Y' in Standard Items – MAI3888 can have a Percentage Item associated with them. For information on adding Percentage Items to a Works Order line refer to the section Adding a Percentage Item – Page109, above.

BOQ Uplift Item ***(Display Only)***

The % BOQ uplift item used for all boq items that require a % uplift will be displayed.

WOL Uplift Item ***(Display Only)***

The Work Order Line uplift item for the selected work order line will be displayed

3.11.5 Completing a Works Order

When completing a works order it is possible to update the schedule items to reflect the actual cost of repairing the defect.

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For information on making an Interim Payment refer to the section Making an Interim Payment above.

To enter the actual cost of repairing the defect and Complete the Works Order Line follow the procedure below:

Change the status of the works order line to COMPLETED.

Enter the completed date.

Update the dimensions in the BOQ Items window to the actual dimensions

Add any further BOQ items if required.

Note:

To avoid problems the [Save] button should be used when each BOQ item has been added.

Once the work order has been instructed, if the wrong BOQ has been entered or the band has changed prior to the entry of the actual values the incorrect BOQ item should be zeroed (it cannot be deleted as it has been used in the definition of the estimated values) before entering the correct item.

Save the changes

Once the changes have been saved no further changes can be made to that works order line or its BOQ items. Once all works order lines are completed the works order will be completed.

3.11.6 BOQ Details

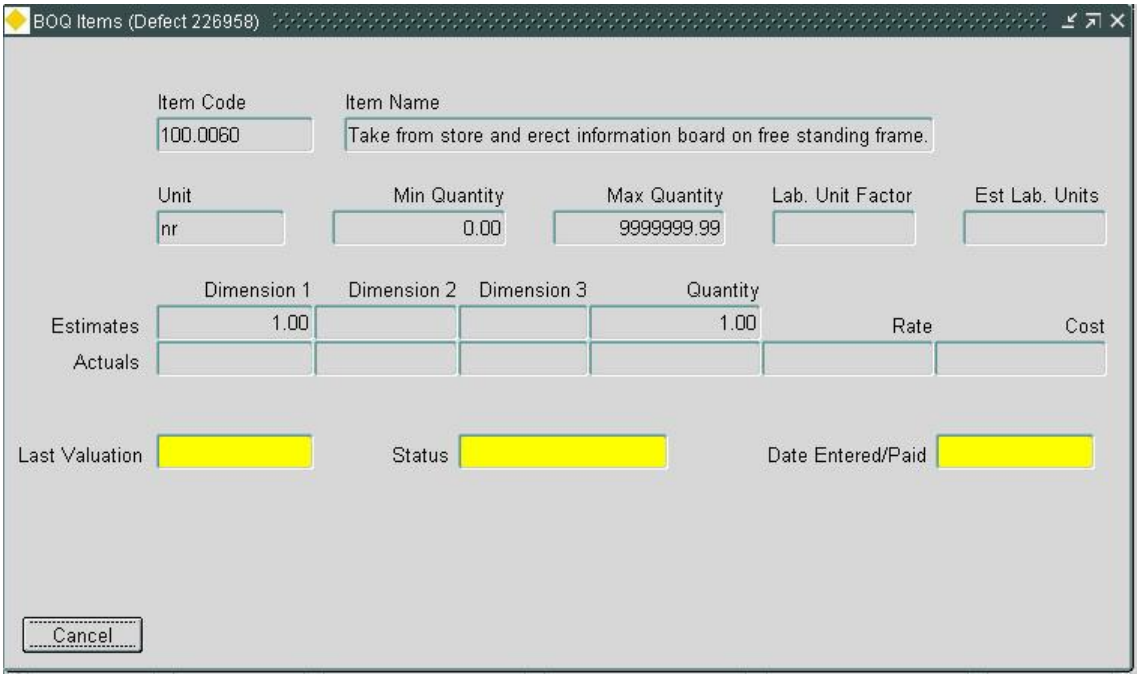

Figure 142 - BOQ Details

This window can be called by pressing the [Expand] button in the menu toolbar when a BOQ item is selected.

It is useful when entering quantities because if the items are banded, this window will show the minimum and maximum allowed values.

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Details of the estimated and actual values are also displayed. If the Works Order Line on which the selected BOQ item is on, is part of an Interim Payment the Last Valuation cost, Status and the Date the Valuation was entered or the payment made will be displayed.

When entering a Valuation for an Interim Payment the Minimum Quantity limit for the Standard Item is overridden, but the Maximum Quantity limit is retained.

Select [Cancel] to return to the BOQ Items window

3.11.7 Invoices

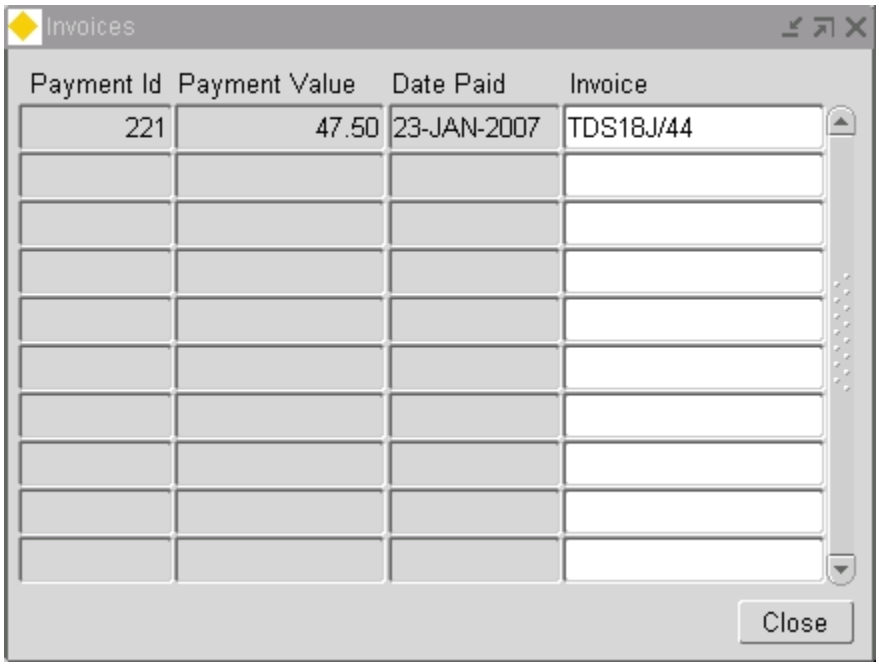

Figure 143 - Invoices

Once a Works Order Line or Part of a Works Order Line, in the case of an Interim payment, has been included in payment run the Invoice details can be displayed by pressing the [Invoices] button on the Works Order Line window.

The Payment Id, Payment Value and Date Paid will be displayed. To add the Invoice number, click in the 'Invoice field' and enter the appropriate value. Press [Save] on the menu toolbar to save the changes.

If the Works Order Line has had a number of Interim Payments made against it, this is a good way to track the payments made to date.

Press the [Close] button to return to the Works Order Line window.

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3.11.8 Works Order Details

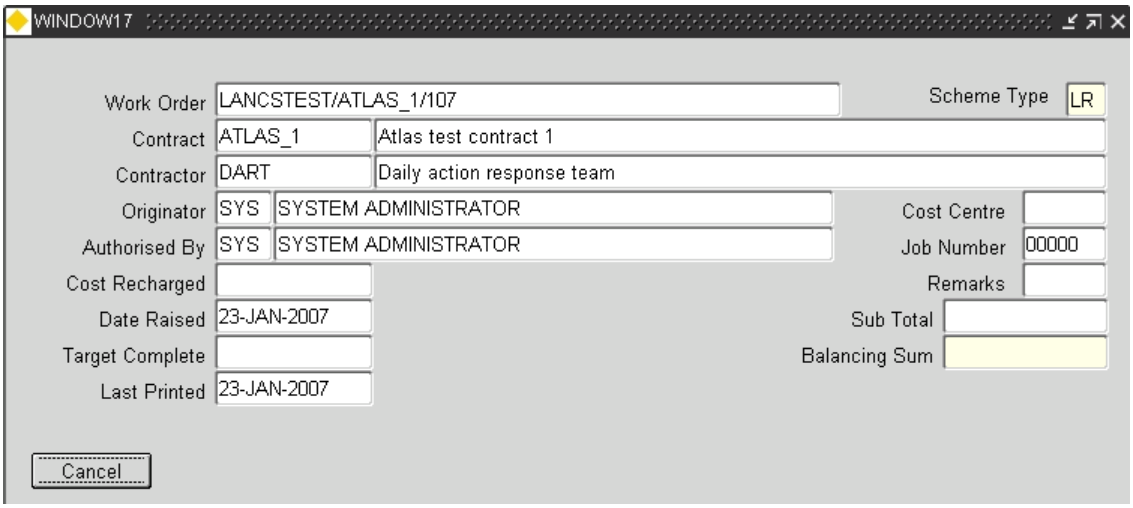

Figure 144 - Work Order Details

This window is displayed when the [WO Details] button is selected in the Works Orders (Contractor) window.
All the information in this window is for information only.
Select [Cancel] to return to the Contractor Interface window.

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3.11.9 Flexible Attributes

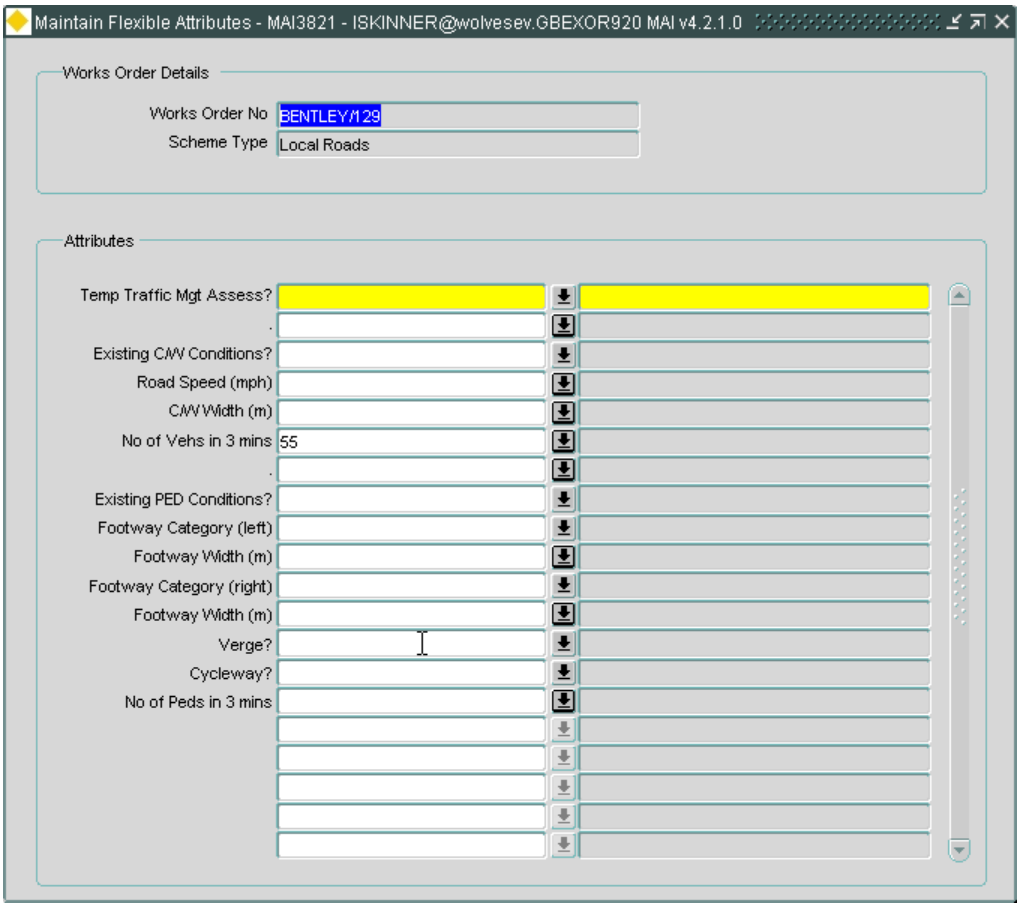

Figure 145 - Flexible Attributes

Each different type of work order may potentially require a different set of information to be held against it. To facilitate this the work order flexible attributes can be linked to individual scheme type.

This allows the customer to define a set of attributes that are specific for a small scheme work order and another set specific for cyclic work orders. The attributes are based on scheme type.

The flexible attributes are set up using the standard asset meta model module by defining a special type of asset record, this asset record is then linked to the appropriate scheme type using Application Attributes – MAI3819.

The Attributes part of the form will display the flexible attributes of the asset metamodel mapped to the scheme type used in the work order. Attribute values can be added or modified.

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3.11.10Programme Details

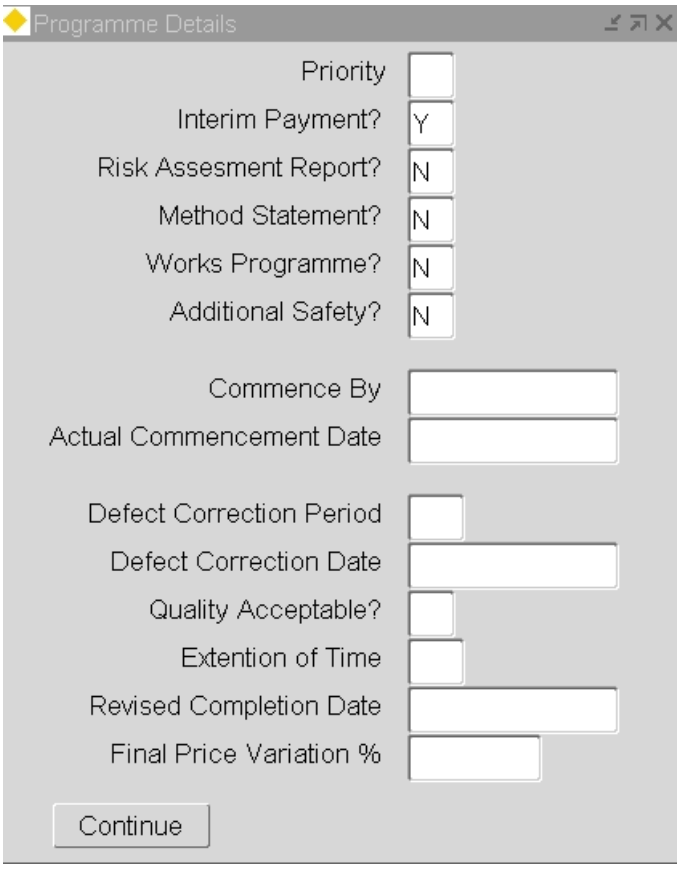

Figure 146 - Programme Details

This window is displayed when the [Programme Details] button is selected in the Works Orders (Contractors) window.
All the information in this window is for information only.
Select [Continue] to return to the Works Orders (Contractors) window.

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3.11.11Standard Item Totals

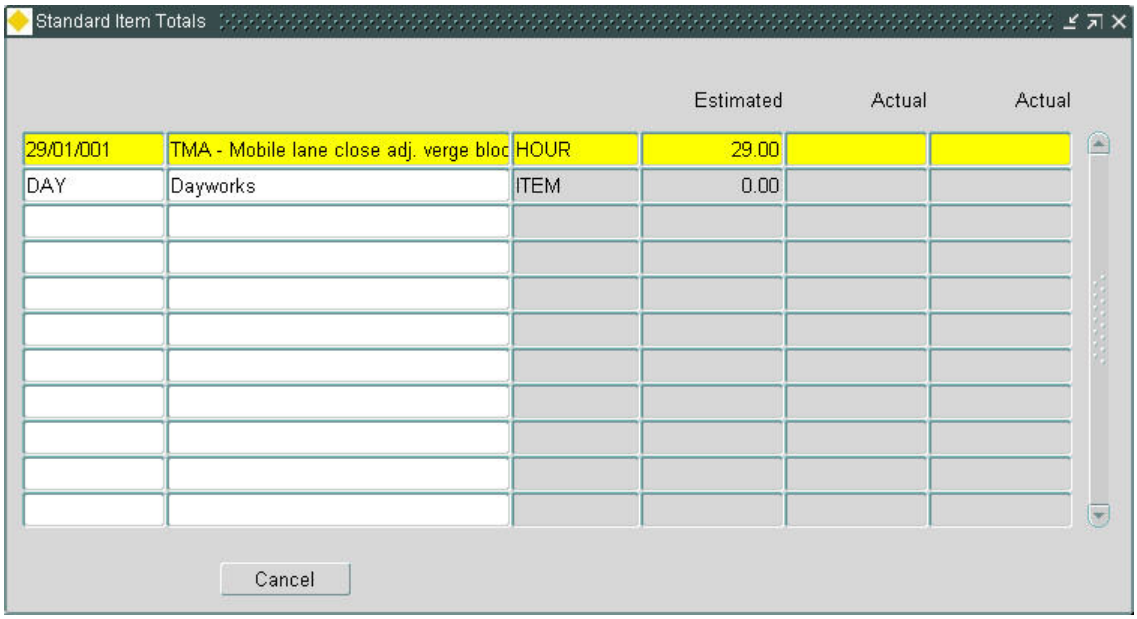

Figure 147 - Stamdard Items

This window is displayed when the [Standard Item Totals] button is selected in the Works Orders (Contractor) window.

It is a display only window, which shows all of the Standard Items currently on this Works Order, as well as the total quantities and costs, both estimated and actual, across the whole works order.

Note that the 'Actual' fields are only displayed after a works order line has been completed or an Interim payment made and will, therefore, initially be empty.

If the contractor has added additional items to the order the estimated values will be empty with the actual values being populated.

Select [Cancel] to return to the Works Orders (Contractor) window.

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3.12 Works Order (Cyclic) – MAI3800a

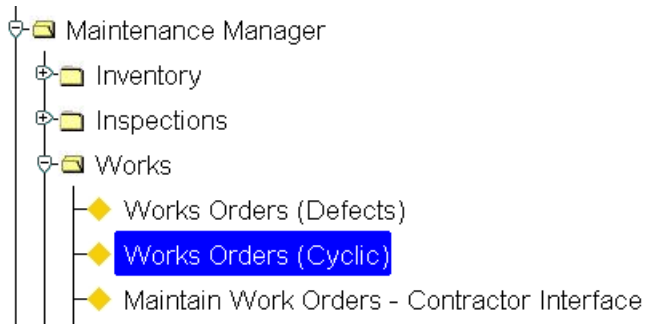

Figure 148 - Work Order (Cyclic) Menu Option

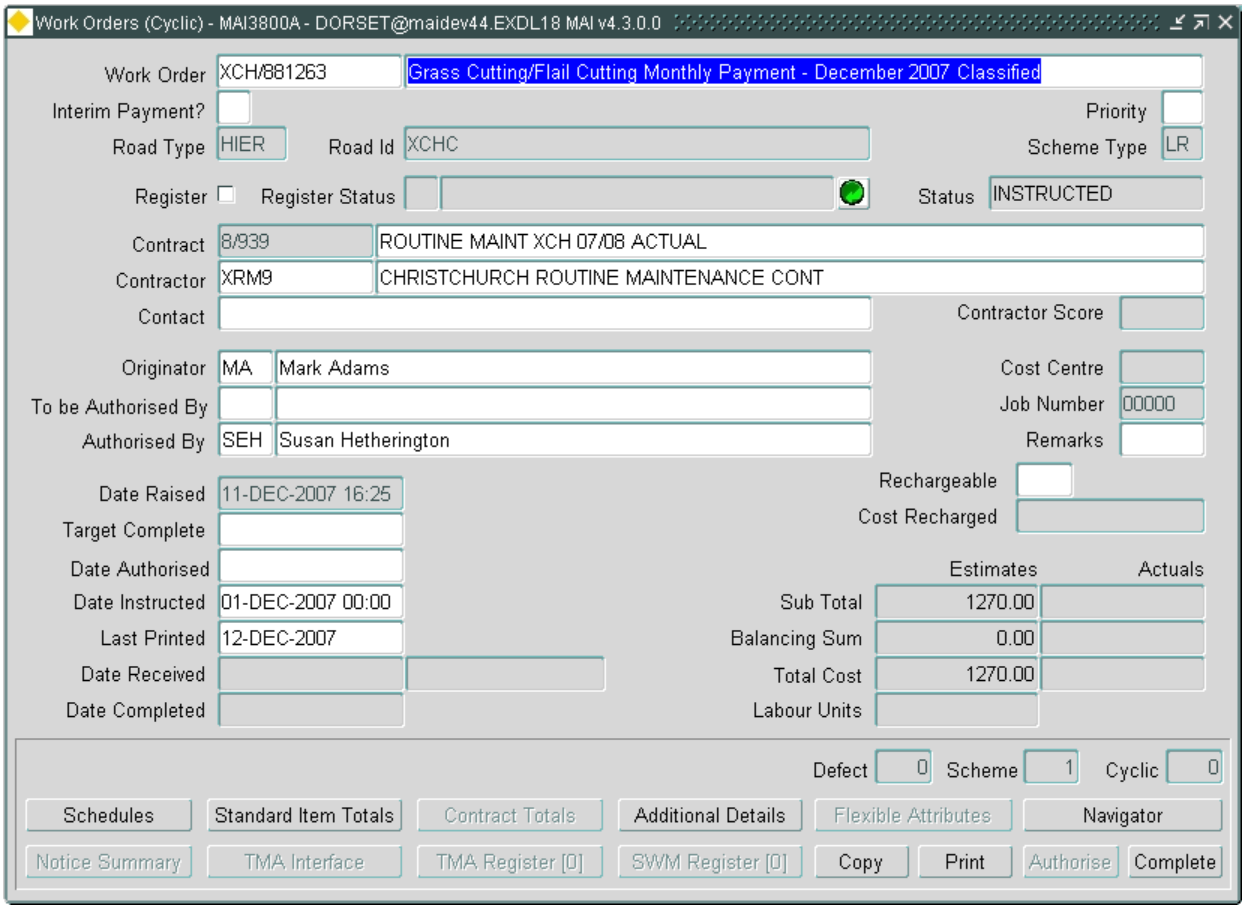

Figure 149 - Work Order (Cyclic)

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3.12.1 General Information

The cyclic maintenance system allows regular maintenance to be predefined by means of a schedule. This schedule is set up via the Cyclic Maintenance Schedules – MAI3860, and defines the standard job items that will make up the regular maintenance work, along with the quantities and costs of those job items.

When creating a cyclic works order, you select the cyclic maintenance schedule to be used and the software will generate all of the works order lines and associated Bills of Quantities. At this point you can amend these job items, adding new ones or removing existing items. As this process is carried out, the various totals and sub-totals contained on the works order are updated instantly.

The Work Order (Cyclic) – MAI3800 form offers you the facility to carry out 'what if' planning by constructing your works order, gradually adding and removing works order lines until the totals match your budget before confirming the works order and forwarding it to the contractor.

Once a Works Order has been instructed, further Works Order lines may not be added to the Works Order unless Product Option ADDINSTR is set to 'Y'. Defects can however be removed from the Works Order any time before the order is completed.

Once a Works Order has been printed using Print BOQ Work Order – MAI3906, further Defects or Works Order lines that have no associated Defects may not be added to the Works Order unless Product Option ADDPRINT is set to 'Y'.

Changes made to a Works Order, its associated Work Order lines or Bill of Quantity Items may be view using the Audit facility within a Works Order. The Audit window may be called by pressing the [Expand] button on the main Works Ordering form.

It is possible to define what items in a Works Order are to be Audited by selecting the required fields using form Works Order Audit Maintenance – MAI3803.

The size of the Audit log trail can be restricted by setting Product Option AUDIT_ALL to 'N'. If this option is set to 'N', only the initial and final values of a field are recorded in the Audit trail, per session per User and any intermediate changes are not be logged.

If Product Option AUDIT_ALL is set to 'Y' then all interim (changes between saving) changes to the selected fields are logged. It should be noted that for some Works Orders, the audit trail could be very large if this option is set to 'Y'.

3.12.2 Work Order

When you enter this window, the cursor sits in the Work Order description field waiting for you to enter a new works order. If you wish to retrieve an existing works order, press [Enter Query], enter your selection criteria, then press [Execute Query] to retrieve the works order.

Whilst in this window, you can view the Work Order Audit details by pressing the [Expand] button in the toolbar at any time.

Work Order ***(Required)*** ***List***

The method of works order number generation is set up in Product Options – HIG9130, setting the WORREFGEN option. There are three methods of generating the works order number.

1. Manually entered by the user, the system will check the number is unique.
2. Contract Based, the contract name will prefix a unique number
3. Admin unit based, the admin unit number for the selected contract will prefix a unique number.

A list of existing works orders is only available in query mode.

When creating new Works Orders enter a description of the order in the adjacent field.

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Interim Payment? ***(Optional)***

Enter 'Y' to signify that the Works Order will be subject to Interim Payments on Part Completed Works Order lines. This may be entered at any time during the life of the Works Order.

Priority ***(Optional)*** ***List***

Enter a Priority for the Works Order. These will have been previously set up using Work Order Priorities – MAI0312 In addition the contents of the WOR_PRIORITY list of values, maintained using Domains – HIG9120, will be concatenated onto the list, this is to cater for backward compatibility. This will automatically populate the Target Date field below.

Road Type ***(Required)*** ***List***

Select the road type for the works order.

If budgets are to be used the road type must match the road types set in the Product Options – HIG9130, for DoT roads – BUDGRPTYPD, for Local roads – BUDGRPTYPL.

Road Id ***(Required)*** ***List***

When <List> is selected only groups of the type entered in the previous field will be displayed, make your selection from this list without drilling down through the gazetteer.

Scheme Type ***(Required, Default)*** ***List***

Select the scheme type under which this work will be carried out.

Some restrictions will apply based on the values set using Item Code Breakdowns – MAI194 (Maintenance Manager System Administration Manual), they are as follows:

The options available on the list will be restricted to whether the road selected is DoT or Locally owned.

The scheme type selected will restrict the work categories available when raising the order.

The scheme type cannot be changed if works order lines are present on the works order.

The product option DEFSCHTYPU must be set to ‘Y’ if the user is allowed to update the default scheme type.

The scheme type will affect the flexible attributed returned when the [Flexible Attributes] button is selected. The flexible attributes for each scheme type are defined by the System Administrator using Application Attributes – MAI3819

Register ***(Optional)*** ***Checkbox***

If all the contents of this works order are to be notified to street works this check box will need to be checked. Once checked the Register Status field will become populated and the [TMA Interface] button will become active. Any work order lines subsequently added to the work order will have to be ticked manually. If unchecked, all work order lines that have not had a notice generated will be deselected.

Register Status ***(Display Only)***

This field will display the current register status of the works order lines.

Current statuses are:

- N – Nothing to Register – One or more works order lines have been ticked as Registerable but no notices have been sent for any of them.

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- O – Outstanding – one or more of the works order lines have been ticked as Registerable and at least one notice has been sent for at least one of them. Only work order lines that have a status of INSTRUCTED can be sent to the register.
- C – Complete – All work order lines that have been ticked as Registerable have had a '0600' notice sent. At this point the [View Register] button will be displayed.

The Refresh button will refresh the status in the active form. The status will be automatically refreshed when the work order is re-queried.

Status ***(Display Only)***

This field will display a status code derived from the various status codes of the work order lines to indicate the overall status of the work order.

Status codes can be viewed in form Status Codes – HIG9110. Work Order Status codes control the work ordering processes and should not be added to or modified without direct consultation with exor.

Contract ***(Required)*** ***List***

Select a valid contract under which this work will be carried out. Contracts are set up using Contracts – MAI3880. (Maintenance Manager Administration Manual)

If you have set up a dummy contract using Product Options – HIG9130 and setting the DUMCONCODE option, this contract can be selected, this will allow you to fully define the work order before assigning it to a contract. Once you have specified the relevant Bill of Quantity items for this work order, press the [Contract Totals] button to view a list of suitable contracts.

If product Option WORREFGEN is set to either 'C' for 'Contract Based' Works Order Reference Number generation or 'A' for Administration Unit Works Order Reference Number Generation and the initial Contract selected is changed, the Works Order will Cancelled and an exact copy made with the new reference number being generated. The Works Order will have '**Cancelled**' appended to the start of it's description.

Contractor ***(Display Only)***

The code and name for the contractor will be displayed. This is obtained from the contract details.

Contact ***(Optional)***

Enter a contact name if required.

Contractor Score ***(Optional)***

If required, enter a score to represent the performance of the contractor in fulfilling this works order. This can only be entered when the works order is complete.

Originator ***(Required, Default)*** ***List***

Select a valid person ID to represent the originator of the contract. Default is the current user.

To be Authorised By ***(Optional)*** ***List***

When creating a work order the user may nominate another user who should authorise the current work order.

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This field will only accept the initials of a user that can view and authorize a work order, this picklist will be populated with those users that have been given the permission to authorise a work order by the System Administrator using Maintenance Manager User Data – MAI4410.

Population of this field does not restrict this work order to be authorised by the selected user, it may be authorised by any user that has the permission to authorise a work order.

Authorised By ***(Optional)*** ***List***

Only the current User Initials are allowed to be entered in this field. If the current user has also raised the Works Order i.e. is the 'Originator', Product Option AUTH_OWN must be set to 'Y' in order for the same person to both Raise and Authorise a Works Order. To Authorise a Works Order its total estimated cost must be within the range defined for the User in Users – HIG1832. If the User has no limits set, they may authorise any value of Works Order.

Works Orders may be individually using this field or in batches using form Works Order Authorisation – MAI3848.

Cost Centre ***(Optional)*** ***List***

These codes are maintained using Cost Centre Codes –MAI3844 (Maintenance Manager Administration Manual)

Job Number ***(Required, Default)*** ***List***

If required, enter the job number for this works order. This field defaults to 00000.

Remarks ***(Optional)*** ***Edit***

If required, enter any additional remarks relating to the completed works order. This can only be entered when the works order is complete.

Date Raised ***(Required, Default)***

Enter the date upon which the works order was raised. This field defaults to the current date. An earlier date may be entered for retrospective works orders.

Target Complete ***(Optional)***

This is the target date for all the works contained within the work order.

This may be automatically populated based on the Date Raised and the Work Order Priority. If the product option UPDWOTGT has been set to ‘Y’ the user may update this date manually.

Date Authorised ***(Optional)***

This is populated with the system date/time when the Works Order is Authorised via

- The Works Order form – MAI3800, [Authorise] or [Instruct] button
- The Work Orders Authorisation form – MAI3848
- The Works Order Work Tray

When this field is populated following the selection of the [Authorise] button a pop up window will be displayed allowing the user to enter a date before the sysdate enabling the authorisation of a retrospective work order.

When this field is populated following the selection of the [Instruct] button the date will be the same date as the instructed date, this also allows the user to enter a date prior to the sysdate for the creation of retrospective work orders.

Note:

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When the User attempts to Authorise a Works Order this date field is used to determine the total value of Works Orders already Authorised by the User on the same day.

If the value of the current Works Order would lead to the User's Daily Authorisation Limit (see the "Max value per Day" field in Maintenance Manager User Data – MAI4410) being exceeded an error will be displayed and the current Works Order will not be Authorised

Date Instructed (Optional)

When the works order has been completely defined and you are ready to issue it to the contractor, set the Date Instructed to the current date by pressing the [Instruct] button on the form. When the Work Order is instructed this button will be used to [Complete] a Works Order. When building the works order, leave this field blank.

All works order lines must be priced before the order can be instructed.

When the [Instruct] button is selected the following pop up window is displayed allowing the user to enter a date that is prior to the sysdate enabling the creation of retrospective work orders.

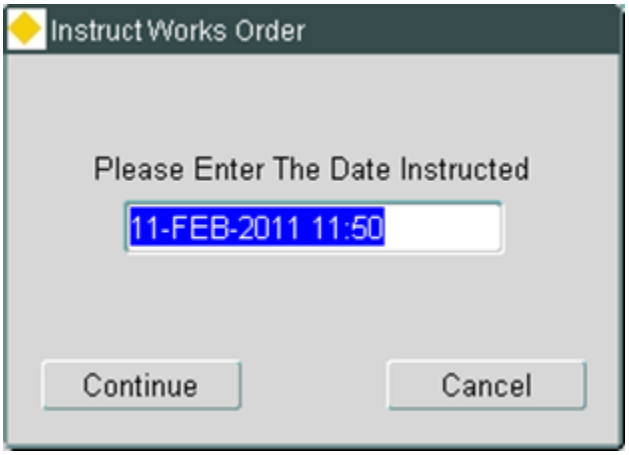

Figure 150 - Instruct pop-up

[Continue] will Instruct the work order at the displayed date and time.

[Cancel] will return the user to the Work Order details with no changes made.

A works order must have a date instructed if the contractor is to view the order using Works Orders – Contractor Interface – MAI3802 and for the work order to be picked up by the CIM interface.

Last Printed (Display Only)

When the works order is printed, the date of printing is displayed here. If the works order is reprinted at any time, this field is updated to reflect the last printing date. This field is part of the works ordering audit trail so each time it is printed an audit is maintained.

Once a works order has been printed changes to the works order lines are not allowed unless the Product Option ADDPRINT is set to 'Y'.

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Date Received ***(Display Only)***

When a contractor accesses the works order using Works Orders – Contractor Interface – MAI3802 this date will be populated, the id of the user who viewed the work order displayed in the adjacent field.

Date Completed ***(Display Only)***

When all of the lines on the works order are completed, this field will display the date of completion. Once the works order is completed and saved, no further changes can be made to the works order.

To complete a works order without completing each individual line select the [Complete] button. This will set all the BOQ Actual values equal to the current estimated values.

To complete a works order by completing each line individually, the User can change the individual line to completed manually and enter a date in the next field. At this point changes can be made to the actual values of the BOQ items, these changes must be made before saving the changes.

Rechargeable ***(Optional)***

Enter either 'Y' or 'N' to indicate if some or all or this work order is rechargeable.

Cost Recharged ***(Optional)***

When a rechargeable defect has been rectified and the works order completed, it is possible to recharge an amount of money to the contractor. If required, enter that amount here.

Estimates, Sub Total ***(Display Only)***

As the works order is being compiled, each works order line is costed up based on the current rates for the job items held against the contract. This figure does not take into account any discount arrangements in place with the contractor.

Estimates, Balancing Sum ***(Display Only)***

If the contractor to which this works order has been assigned uses Discount Groups – MAI3624 (Maintenance Manager Administration Manual), then a percentage discount is applied to the total estimated works order cost. The pre-discount total is displayed in the Sub-Total field above. The balancing sum field contains the calculated value of the discount.

Estimates, Total Cost ***(Display Only)***

This field contains the sum of the Estimated Sub-Total and Estimated Balancing Sum fields above. If the contractor has no discount groups in place, then the Sub-Total and Total Cost fields will be the same. If a discount group structure is in place, then this field will show the works order cost after the discount has been applied.

Estimates, Labour Units ***(Display Only)***

If labour units have been entered in Standard Items – MAI3888 the total labour requirements for carrying out the work will be displayed here.

Actuals, Sub Total ***(Display Only)***

As the works order is being completed, the actual works order line values are accumulated into this field. This figure does not take into account any discount arrangements in place with the contractor.

Actuals, Balancing Sum (Display Only)

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If the contractor to which this works order has been assigned uses Discount Groups – MAI3624 (Maintenance Manager Administration Manual), then a percentage discount is applied to the total actual works order cost as displayed in the field above. The pre-discount total is displayed in the Sub-Total field above. The balancing sum field contains the calculated value of the discount.

Actuals, Total Cost (Display Only)

This field contains the sum of the Actual Sub-Total and Actual Balancing Sum fields above. If the contractor has no discount groups in place, then the Sub-Total and Total Cost fields will be the same. If a discount group structure is in place, then this field will show the works order cost after the discount has been applied.

Figure 151 - Work Order Content Summary

These three fields are displayed at the bottom of the main works order window and indicate the number and type of work order lines that are contained within the work order.

A number of buttons have been defined on this window for use when raising a works order, they are as follows:

[Schedules] Opens the Schedules window and allows the user to add works order lines.

[Standard Item Totals] Opens the standard item totals window and displays the estimated and actual costs and quantities for each standard item in the works order.

[Contract Totals] Opens the contract totals window and displays all contracts that can fulfill the work contained on the works order with associated costs and scores.

An alternative contract can now be selected if required.

[Additional Details] Opens the additional details window, additional additional details can be added if required.

[Flexible Attributes] Opens the maintain flexible attributes window, attribute values can be added if required. (Figure 110)

[Navigator] Opens Navigator which allows the user to view and retrieve data associated a work order, an example of this is shown below: Details on the use of navigator can be found in the Query Builder and Navigator User Manual.

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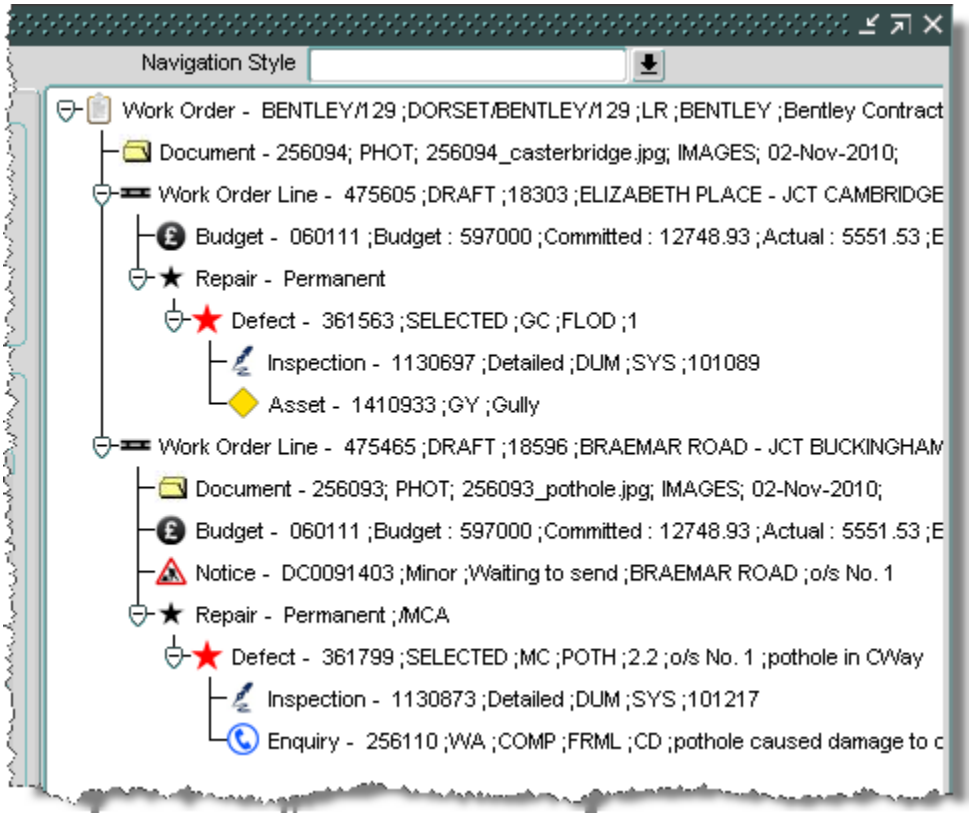
Navigation Style
Work Order - BENTLEY/129 ;DORSET/BENTLEY/129 ;LR ;BENTLEY ;Bentley Contract
Document - 256094; PHOT; 256094_casterbridge.jpg; IMAGES; 02-Nov-2010;
Work Order Line - 475605 ;DRAFT ;18303 ;ELIZABETH PLACE - JCT CAMBRIDGE
Budget - 060111 ;Budget : 597000 ;Committed : 12748.93 ;Actual : 5551.53 ;E
Repair - Permanent
Defect - 361563 ;SELECTED ;GC ;FLOD ;1
Inspection - 1130697 ;Detailed ;DUM ;SYS ;101089
Asset - 1410933 ;GY ;Gully
Work Order Line - 475465 ;DRAFT ;18596 ;BRAEMAR ROAD - JCT BUCKINGHAM
Document - 256093; PHOT; 256093_pothole.jpg; IMAGES; 02-Nov-2010;
Budget - 060111 ;Budget : 597000 ;Committed : 12748.93 ;Actual : 5551.53 ;E
Notice - DC0091403 ;Minor ;Waiting to send ;BRAEMAR ROAD ;o/s No. 1
Repair - Permanent ;MCA
Defect - 361799 ;SELECTED ;MC ;POTH ;2.2 ;o/s No. 1 ;pothole in CWay
Inspection - 1130873 ;Detailed ;DUM ;SYS ;101217
Enquiry - 256110 ;WA ;COMP ;FRML ;CD ;pothole caused damage to c

Figure 152 - Navigator

[Notice Summary] This button is enabled if the TMA product is licensed and one or more notices have been sent for the work order. The Work Order TMA Interface – TMA3990 will be called and opened at the 'Work Order Lines' tab.

[TMA Interface] This button is enabled if the TMA product is licensed and one or more work order lines are ticked as 'Registerable'. The Work Order TMA Interface – TMA3990 will be called and opened at the 'TMA Noticing' tab.

[TMA Register] This button is enabled if the TMA product is licensed and one or more notices have been sent for the work order. The Works – TMA1000 will be called which will display the TMA Works that have been created for the work order.

[SWM Register] The SWM works entries in the street works register can be viewed using this button (Figure 130).

[Copy] Copy work order is intended for use on small scheme work orders.

[Print] Prints the instructed works order, the format of the printout is set up in Product Options – HIG9130 and setting the WORREPMOD option to the required works ordering report.

Once a works order has been printed changes to the works order lines are not allowed unless the Product Option ADDPRINT is set to 'Y'

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[Authorise] Sets the Date Authorised to today's date and time (sysdate). When this button is selected a pop up window is displayed allowing the user to enter a date that is prior to the sysdate enabling the creation of retrospective work orders.

Note:

A user will only be able to authorise a work order if they have been given the appropriate permission by the system administrator using Maintenance Manager User Data – MAI4410

When the User attempts to Authorise a Works Order the Date Authorised field is used to determine the total value of Works Orders already Authorised by the User on the same day.

If the value of the current Works Order would lead to the User's Daily Authorisation Limit (see the "Max value per Day" field in Maintenance Manager User Data – MAI4410) being exceeded an error will be displayed and the current Works Order will not be Authorised

[Instruct] When this button is selected a pop up window is displayed containing the current date and time (sysdate), this allows the user to enter a date that is prior to the sysdate enabling the creation of retrospective work orders.

If the work order has not been authorised this will also authorise the work order provided the user has the appropriate permissions (see the [Authorise] button for details).

Once the 'Date Instructed' has been saved, the button will change to read [Complete].

Work order lines can be added to an instructed works order if the Product Option ADDINSTR is set to 'Y'.

[Complete] Completes all works order lines, once this button has been selected and the date entered, no changes can be made to the works order.

To make changes to the actual BOQ values, Works Order lines should be completed individually using the following process:

1: Change the work order line status code to COMPLETE.

2: Update all the BOQ items for the work order lines to reflect the actual values.

3: Save the changes.

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3.12.3 Schedules

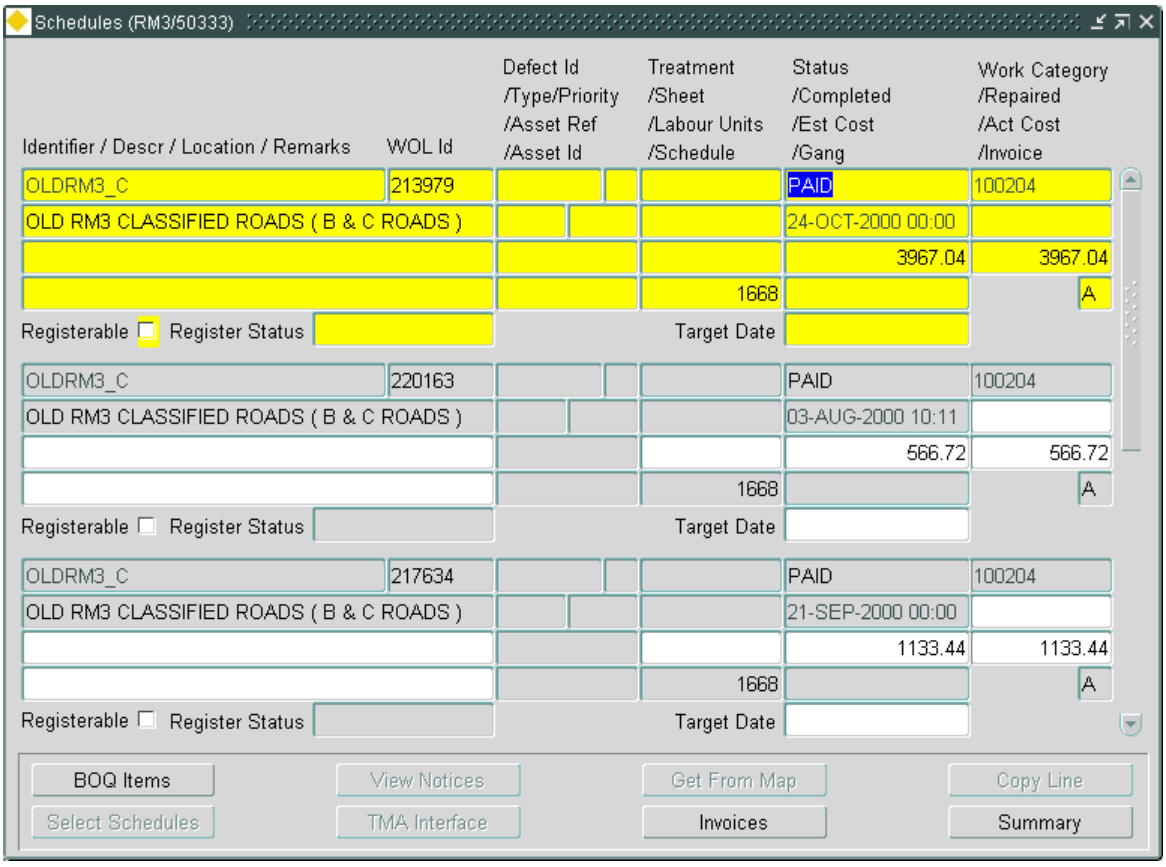

Figure 153 - Schedules

When this window is first displayed it will be blank, select the [Select Schedules] button to retrieve the required schedule. It holds details of each of the cyclic maintenance tasks selected for inclusion on the works order. Each of these tasks is known as a 'Work Order Line'.

Initially, this block will contain a line for each of the road sections within the selected group. If the "By Asset" flag set to 'Y' in the Cyclic Maintenance By Road Section Form - MAI3862 a work order line will be displayed for each asset.

If you want to remove a section from the works order, position the cursor on the appropriate line and press [Delete Record] in the toolbar.

Pressing the [Expand] button whilst on a works order line will display View Cyclic Maintenance Work.

Once a Works Order has been instructed, Works Order lines may not be added to the Works Order unless Product Option ADDINSTR is set to 'Y'.

Once a Works Order has been printed using Print BOQ Work Order – MAI3906, further Works Order lines may not be added to the Works Order unless Product Option ADDPRINT is set to 'Y'.

Identifier ***(Display Only)***

Displays the road part/section ID where this work is located.

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Descr ***(Display Only)***

Displays the full name of the road section.

Location

This field will always be blank when dealing with cyclic works order lines.

Remarks ***(Display Only)***

Enter any remarks regarding the works order line prior to completing the works order line.

WOL Id ***(Display Only)***

Displays the work order lines internal Id number.

Defect Id

This field will always be blank when dealing with cyclic works order lines.

Defect Type

This field will always be blank when dealing with cyclic works order lines.

Defect Priority

This field will always be blank when dealing with cyclic works order lines.

Asset Ref ***(Display Only)***

If this work order is as a result of a schedule where the "By Asset" flag set to 'Y' in the Cyclic Maintenance By Road Section Form - MAI3862 the Asset Ref will be displayed.

Asset Id ***(Display Only)***

If this work order is as a result of a schedule where the "By Asset" flag set to 'Y' in the Cyclic Maintenance By Road Section Form - MAI3862 the Asset Id will be displayed.

Treatment

This field will always be blank when dealing with cyclic works order lines.

Sheet

This field will always be blank when dealing with cyclic works order lines.

Lab Units ***(Display Only)***

Displays the number of labour units estimated to rectify this defect. This is derived from the contract under which this works order is being raised. If the Labour Units field is blank, check that the current job item appears on the contract.

Schedule ***(Display Only)***

This field will display the cyclic maintenance schedule number.

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Status *(Display Only)* *List*

Displays the current status of the works order line.

For more information on status codes please refer to the section Defect Status Codes in this manual.

Initially a works order line will have a status of DRAFT.

Once the work order has been instructed and saved the work order line will become INSTRUCTED.

As work on the Works Order Line progress's this Status will be changed either by the User, in the case of Interim Payments or automatically by the system as is the case when a Works Order line is included on a Payment Run.

Note: When updating the status code you must select [Tab] to move to the next field before entering any further data.

Note: Any new work order lines added to a work order that is instructed will have the status of INSTRUCTED.

Completed *(Optional)*

Enter the completion date of the works order line.

Est Cost *(Display Only)*

This field displays the estimated cost of the repair. This cost is calculated from the contract rates.

Note that if this field is blank there is no rate on the current contract for this job item and, therefore, the system is unable to calculate the cost of the job item and the works order can not be instructed.

Gang *(Required)*

If Gang Allocation has been used to allocate a gang to the repair of this defect the gang id will be displayed.

Work Cat *(Required)*

The work category for the selected work will be displayed. If budgets are being used a commitment will be made against this Item code. The current position of the Budget can be displayed by double clicking this field as shown below. The current value of work committed, the actual value of work carried and the overall balance will be displayed for each Budget. The Upper Limit of the Budget will also be displayed.

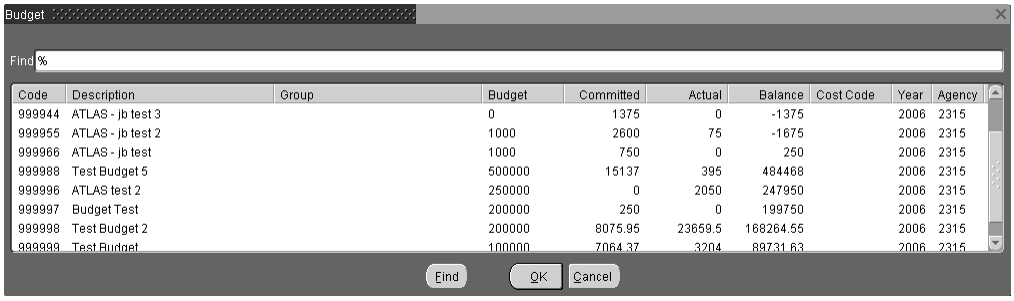

Figure 154 - Work Category

Repaired *(Display Only)*

The date and time of the defect repair will be displayed..

Act Cost *(Display Only)*

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This field will display the actual cost of carrying out the work. As the actual cost is only known once the defect has been repaired and the Status updated to COMPLETED, or an Interim Payment has been made and the Status updated to PART-PAID this field will initially be blank.

Invoice *(Display Only)*

This is a payment Invoice flag used within the Financial Payment process. Valid values are:

Null No invoices have been processed or the status is instructed.

O At least one outstanding records remains in the payments table

H At least one held record remains in the payments table

B Both held and outstanding records remain in the payments table

A Only approved records remain in the payments table

Once a Works Order Line has been included in a Payment Run the Invoice details can be viewed by pressing the [Invoice] button on the window.

Once the changes have been saved no further changes can be made to that works order line.

Registerable *(Checkbox)*

This tick box is used to indicate whether an individual line should be registered with TMA. If this is checked the 'Registerable' tick box at the work order level will be updated automatically (if not already checked).

Register Status *(Display Only)*

This Line level Register Status field indicates the Noticing Status of the individual work order line. The status of this field depends on the following logic:

- Nothing Registered – The WOL has been ticked as 'Registerable' but no Notices have been sent for it.
- Outstanding – The WOL has been ticked as 'Registerable' and at least one Notice has been sent for it but not a 0600 – Works Stop Notice.
- Completed – The WOL has been ticked as 'Registerable' and a 0600 – Works Stop Notice has been sent.

Once a Works Order Line has been included in a Payment Run the Invoice details can be viewed by pressing the [Invoice] button on the window.

Target Date *(Required)*

The target date for the work order line can be entered manually for non defect clearance work orders. The target dates for the individual work order lines will affect the overall work order Target Date.

A number of buttons have been defined on this window for use when raising a works order, they are as follows:

[BOQ Items] Opens the BOQ Items window where BOQ items can be added to or removed from the selected works order line. (Figure 156)

[Select Schedules] Opens the Selection Criteria window and allows the user to select the schedules that are to be included on the works order. (Figure 155)

[View Notices] This button is enabled when one or more streetwork notices have been sent for the currently selected work order line. The Work Order TMA Interface – TMA3990 is called in read only mode and is navigated to the Work Order Lines tab. (Figure 73)

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[TMA Interface] This button is enabled when one or more work order lines are ticked as Registerable. The Work Order TMA Interface – TMA3990 is called and is navigated to the TMA Noticing tab (this is the same functionality as the Work Order level [TMA Interface] button). (Figure 72)

[Get From Map] This button is enabled when the WOL Id is populated and the Work Order Line status is not COMPLETE. Locator – NM0572 is called to allow the user to digitise a new location or shape for the defect or work order. This will give the user the option to enter a point, polyline or polygon that better represents the location and the shape of the work to be carried out on the selected work order line. (Figure 36)

[Invoices] This will display any interim payment invoices that apply to this work order line. (Figure 169)

[Copy Line] This will create a copy of the selected works order line and associated BOQ items, all copied BOQ item quantities are re-set to zero. A work order line can only be copied if it a small scheme order.

[Summary] Opens the Schedules summary window and displays a summary of the works order lines on the currently selected Works Order.

3.12.4 Select Schedules Button

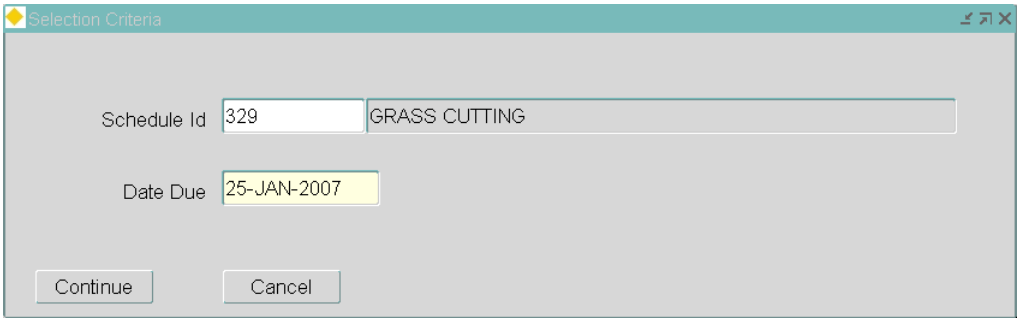

Figure 155 - Select Schedules Button

This window allows you to select the schedule to be used to generate this works order. The schedule must have been predefined using Cyclic Maintenance Schedules – MAI3860 and Cyclic Maintenance Schedules by Section – MAI3862.

Schedule Id ***(Required)*** ***List***

Select the schedule that you wish to use to generate this works orders lines. A description will be displayed in the adjacent field.

Date Due ***(Required)***

Enter a date by which the work must be completed. This can be printed on the works order if required.

Two buttons have been defined on this window for use when raising a works order, they are as follows:

[Continue] The system will generate the works order lines and their associated BOQ items. A works order line will be created for each road section within the schedule.

[Cancel] Return to the Selection Criteria window without returning any works order lines.

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3.12.5 BOQ Items

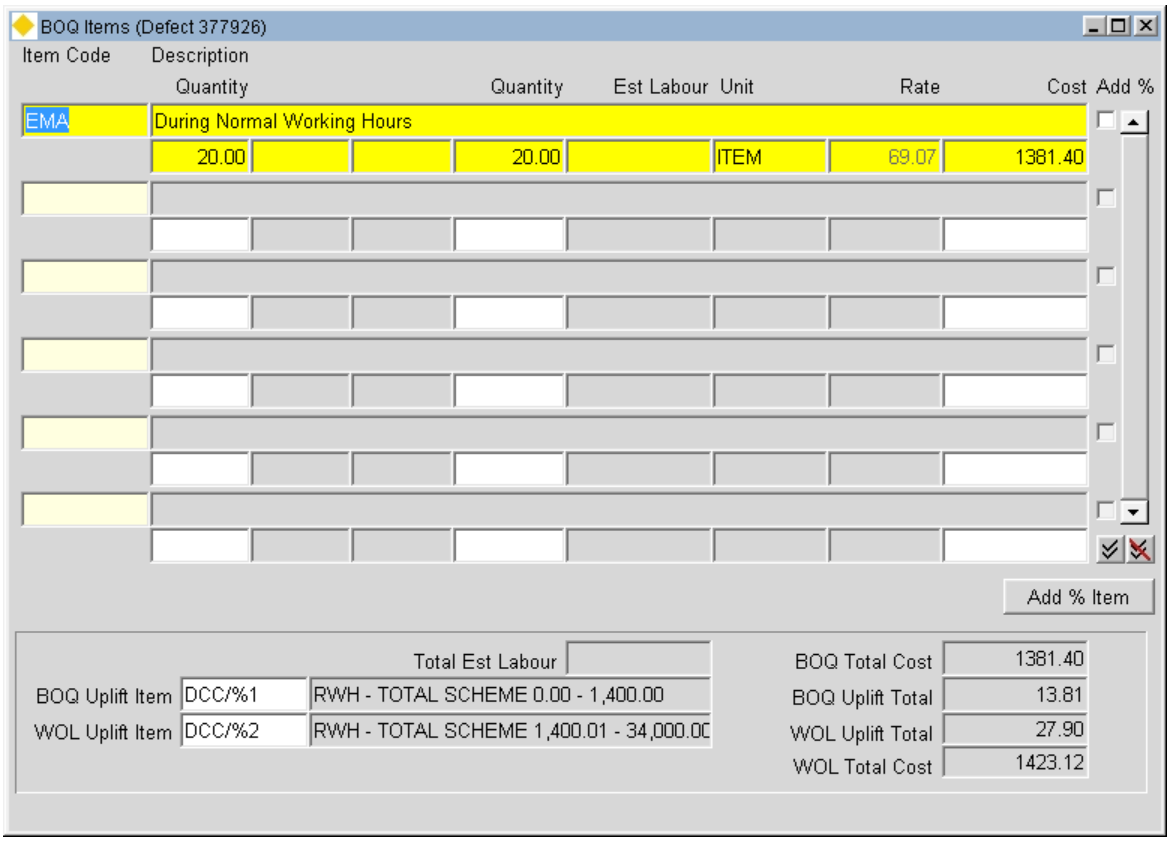

Figure 156 - BOQ Items

This window is displayed when the [BOQ Items] button is pressed in the Schedules window.

This window enables you to select the schedule items to carry out the work specified in the Schedules window.

To add items, press the [Create Record] button in the toolbar. This will enable you to add a new item.

Note:

To avoid problems the [Save] button should be used when each BOQ item has been added.

Once the work order has been instructed, if the wrong BOQ has been entered or the band has changed prior to the entry of the actual values the incorrect BOQ item should be zeroed (it cannot be deleted as it has been used in the definition of the estimated values) before entering the correct item.

Item Code ***(Required)*** ***List***

Select a valid standard job item to represent a task to be carried out by the contractor.

On an Instructed works order any items added must exist on the selected contract.

Description ***(Display Only)***

Displays the description of the standard job item. Note that for Rogue Items, this field becomes updateable to allow you to describe the Rogue Item in greater detail.

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Quantity ***(Required or Optional)***

The first three fields allow the user to specify up to three dimensions associated to the Item if they are required for the specified item. Each standard job item can have one or more dimensions associated with it, depending on the nature of the work represented by the job item. For example, replacing damaged kerbing will have a single dimension representing the length of kerbing to be replaced, whilst filling a pothole may have three dimensions representing the length, width and depth of the pothole to be filled. Consequently, these three dimension fields are Required or Optional according to the needs of the job in question.

Note: The message line will display a message explaining what unit of measurement should be used for each dimension field. This message will be of the form 'Enter the Length'.

Quantity ***(Display Only)***

Displays the calculated quantity of work based on the dimensions supplied in the previous fields. The unit of this field is displayed in the Unit field described below.

Unit ***(Display Only)***

Displays the unit of measurement of this job item. This unit relates to the Total Qty field described above.

Rate ***(Display Only)***

Displays the rate per unit for this work item as held on the contract under which this works order is being created. If a rouge item is added the rate must also be added to the item.

Cost ***(Display Only)***

If the order is not issued the estimated cost will be displayed, if the order is complete the actual cost will be displayed.

Details of both the estimated and actual costs and quantities can be viewed for each item by selecting the [Expand] button from the toolbar.

Add % ***(Check Box)***

If this item is to attract a percentage increase or decrease using a Percentage Item tick this box. Note that only Standard Job Items which have the 'Allow Percentage Flag?' flag set to 'Y' in Standard Items – MAI3888 can have a Percentage Item associated with them. For information on adding Percentage Items to a Works Order line refer to the section Adding Percentage Items to a Works Order Line, below

Total Est Labour ***(Display Only)***

Displays the total estimated labour costs for the cyclic works.

Total Cost ***(Display Only)***

Displays the total cost of the cyclic works.

BOQ Uplift Item ***(Optional)*** ***List***

Enter the BOQ uplift item, this item will uplift all the BOQ items that have the 'Allow Percent Items ?' field set to 'Y' in Standard Items – MAI3888.

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The List of Values will only contain those items that have the 'BOQ Percent Uplift ?' set to 'Y' in Standard Items – MAI3888

WOL Uplift Item ***(Optional)*** ***List***

Enter the Work Order Line uplift item, this item will uplift the entire work order line.

The List of Values will only contain those items that have the 'WOL Percent Uplift ?' set to 'Y' in Standard Items – MAI3888

Note:

When a Repair, having either BOQ or WOL Percent Uplift Item Codes assigned, is added to a Work Order, a check is made against the Contract for that work order to determine if the Standard Item Code has been assigned as a Contract Item, and that the contract will allow for Percentage Uplifts. If not, the user will be prevented from saving, or Instructing, the Work Order.

3.12.6 Percentage Uplifting of the value of an individual work order line

Entering a BOQ uplift item to a work order line will uplift the value of the work order line by applying the percentage uplift only to those BOQ items that have been flagged as 'Allow Percent Items' = 'Y' in Standard Items – MAI3888.

In addition, if the entire work order line needs a percentage uplift, entering a WOL Uplift item to the work order line will apply the uplift to the entire line including any BOQ percentage uplifts that have already been applied.

Note: If the value of the Work Order needs to be uplifted based on a banding for the value of the entire work order then Discount Groups – MAI3624 (Maintenance Manager Admin) should be used.

3.12.7 Adding Individual Percentage Items to a BOQ Item

Adding a Percentage Item to a Bill Of Quantities allows the cost of the BOQ item to which the Percentage Item is associated, to be increased or decreased depending on the percentage value defined for the Percentage Item in the selected Contract. For example, work carried out on Bank Holidays may attract a percentage surcharge. Adding a Percentage Item to the BOQ would allow this surcharge to be applied.

Percentage Items may only be associated with the Standard Job Items which have the 'Allow Percent Items ?' flag set to 'Y' in Standard Items – MAI3888 (Maintenance Manager System Administration Manual)

Percentage Items are those Standard Job Items which have the Unit of Measurement as defined for Product Option PERC_ITEM e.g., PERCENTAGE.

The computation method for a Percentage Item is determined by Product Option CUM_PERC and can either by:

NORMAL When set to NORMAL a percentage item will display the percentage of the standard item.

Or

CUMULATIVE A setting of CUMULATIVE will result in the percentage item being the sum of the standard item and other percentage items related to the standard item.

The Product Option Value can be overridden by adding the required value into the 'Percent Item Computation' field in the Program details window. This will set the Computation method for any subsequent Percentage Items added to a BOQ for a Works Order line on the current Works Order, to the value entered. This allows for different Computation methods to be used without the need to edit the Product Option value.

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Note that these Values (Normal and Cumulative) are defined in Status Codes – HIG9110 and Domain Code PERC_ITEM_COMP.

3.12.8 Computation Method

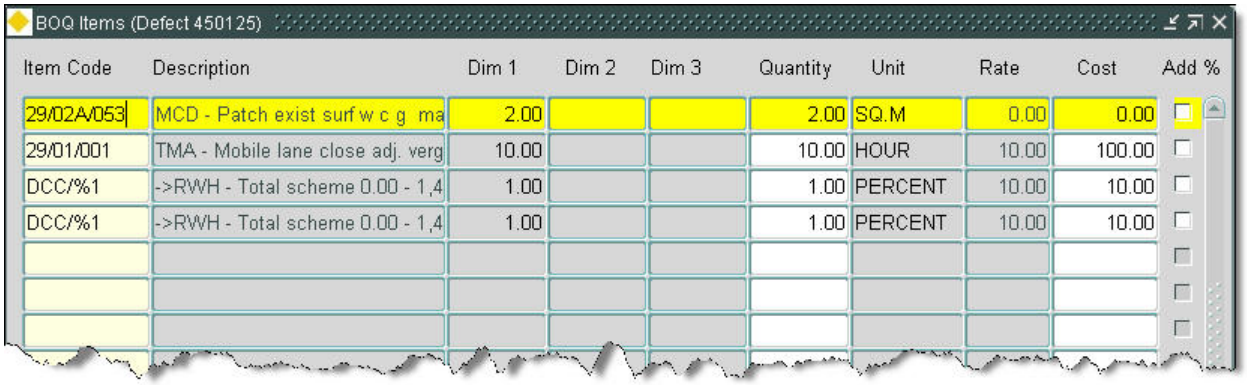

Figure 157 - Normal Computation Method

Figure 157 shows a Bill of Quantities where an Item Code, 29/01/001, has a cost of £100.00. A percentage Item has been associated with it because the bituminous material being used for the repair is of a special grade. The Percentage Item selected has a rate of 10 % thus the total cost of the repair will be increased by £10.00 to £110.00.

If this work was to be carried out on a weekend, and weekend work attracted a surcharge of 10% on the total cost of a repair a 2nd percentage item could be associated with the BOQ item to allow for this. If the weekend surcharge only applied to the cost of the initial Item Code i.e. £900, the extra cost for weekend work would an extra £90 and the computation method used to calculate this would be NORMAL.

If however, the weekend surcharge applies to the Initial Item Code and any other Percentage Items associated with BOQ Item, the computation method used should be set to CUMULATIVE. Figure 126 shows the same BOQ item with Product Option CUM_PERC set to CUMULATIVE.

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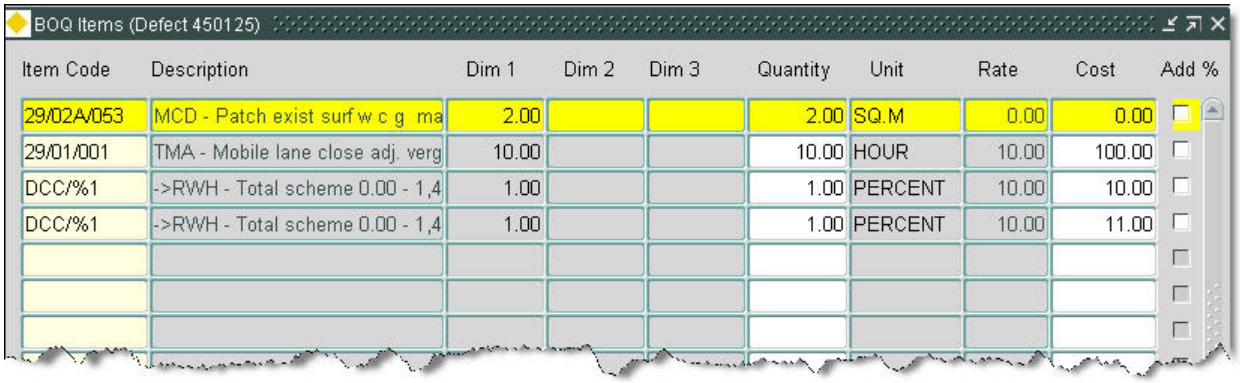

Figure 158 - Cumulative Computation Method

The initial Percentage Item has been calculated as a percentage of the cost of the BOQ item 29/01/001, i.e. 10% of £100.00 equaling £10. The 2nd Percentage Item for Weekend Work has been calculated as a percentage of the sum of the initial BOQ Item 29/01/001 + the initial Percentage Item, i.e. 10% of (£100+£10) giving a total cost of £121.00.

3.12.9 Adding a Percentage BOQ Item

To add a Percentage Item to a Bill Of Quantities the Percentage Item must have added to the currently selected Contract. If a different Contract is subsequently selected, the Works Order can not be Instructed unless the Percentage Item has also been added to the newly selected Contract.

To add a Percentage Item do the following:

1. Navigate to the BOQ Items window by clicking on the [BOQ Items] button on the Works Order Lines window.
2. Select the BOQ Item to which the Percentage Item is to be added.

   Note: This item must have the 'Allow Percentage Item ?' filed set to 'Y' in Standard Items – MAI3888.
3. Check the 'Add %' box for the selected Item on the right of the window.
4. Click on the [Add %] button on the BOQ Items window.
5. A list of valid Percentage Items will be displayed.
6. Select the required %age item from the List
7. The selected %age item will be added to the BOQ. An → will be displayed beside the %age item to signify that it is a child item of the main Standard Job Item

   Note: Quantities for Percentage Items cannot be amended.
8. Select the [Check All] to check all BOQ items displayed.
9. Select [Uncheck All] to clear all checked BOQ items.

3.12.10Adding Non-Contract Items to a Works Order

Normally, the Bill of Quantities on a works order is defined as a series of standard job items as described above. These items have agreed unit rates. Occasionally, however, it is required to add an item to a works order that is not on the contract. This can be achieved by the use of Rogue Items (sometimes known as 'Wildcard Items').

A Rogue Item is simply a standard job item with no preset rate, quantity or description. Generally, it will have item codes ending '9999'. When you select a Rogue Item from the list of items the Item Description, Total Qty, and Rate fields will be empty. You can then complete these fields to effectively create a non-standard item. It is important to note that for the software to be able to calculate the works order totals correctly, you must enter a rate for the Rogue Item.

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Standard job items (including Rogue Items) are managed through Standard Items – MAI3888 (For further information on Standard Items, refer to the Contracts and Contractors section of the Maintenance Manager Administration Manual).

3.12.11Contracts and Rates

It is possible to select standard job items which do not appear on the current contract for this works order. These items can be identified as the Rate field will be empty, indicating that there is no known unit rate for this item in the selected contract. In this situation, the software will not be able to calculate the Total Qty for this item and can therefore not cost the works order correctly. This can be used effectively when comparing multiple contracts, the contract selected when raising the works order may not be the contract suitable once all the schedule items have been entered.

To circumvent this situation you must do one of the following actions:

- Replace the job item with an item which appears on the current contract.
- Replace the job item with a Rogue Item.
- Select a different contract.
- Add the missing item to the current contract.

As a general rule, the works order can only be issued and printed when all the items on it have a rate, either from the contract or as rogue items.

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3.12.12Works Order Audit

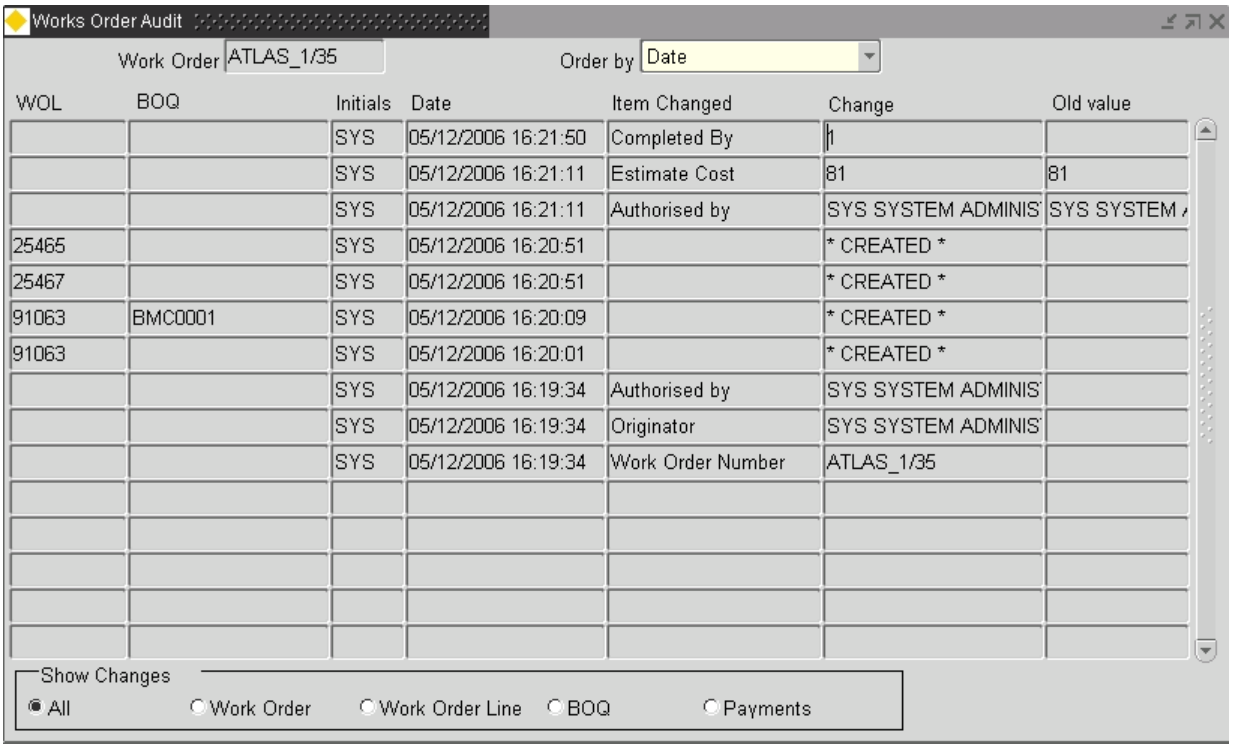
Works Order Audit
Work Order ATLAS_1/35
Order by Date
WOL BOQ Initials Date Item Changed Change Old value
SYS 05/12/2006 16:21:50 Completed By 1
SYS 05/12/2006 16:21:11 Estimate Cost 81 81
SYS 05/12/2006 16:21:11 Authorised by SYS SYSTEM ADMINIS SYS SYSTEM
25465 SYS 05/12/2006 16:20:51 * CREATED *
25467 SYS 05/12/2006 16:20:51 * CREATED *
91063 BMC0001 SYS 05/12/2006 16:20:09 * CREATED *
91063 SYS 05/12/2006 16:20:01 * CREATED *
SYS 05/12/2006 16:19:34 Authorised by SYS SYSTEM ADMINIS
SYS 05/12/2006 16:19:34 Originator SYS SYSTEM ADMINIS
SYS 05/12/2006 16:19:34 Work Order Number ATLAS_1/35
Show Changes
All Work Order Work Order Line BOQ Payments

Figure 159 - Work Order Audit

The Works Order Audit shows the changes made to the fields on the Works Order which have been selected in form Works Order Audit Maintenance – MAI3803 and can be called by pressing the [Expand] button on the menu toolbar form the main Works Order window.

The size of the Audit log trail can be restricted by setting Product Option AUDIT_ALL to 'N'. If this option is set to 'N', only the initial and final values of a field are recorded in the Audit trail, per session per User and any intermediate changes are not be logged.

If Product Option AUDIT_ALL is set to 'Y' then all changes to the selected fields are logged. It should be noted that for some Works Orders, the audit trail could be very large if this option is set to 'Y'.

The Order in which Audited changes are displayed can be determined by setting a value in the 'Order By' field.

In addition work order auditing may be carried out using Audit Manager

The type of audited changes displayed can be determined by clicking the appropriate check box in the 'Show Changes' portion of the window as shown below

Figure 160 - Show Changes

The changes displayed can be restricted to the following areas:

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- Main Works Order changes
- Works Order Line changes
- Bill Of Quantity changes
- Payment detail changes

The following information is displayed

WOL ***(Display Only)***

The Defect Id or Works Order Line number will be displayed

BOQ ***(Display Only)***

The BOQ Standard Item Code will be displayed

Initials ***(Display Only)***

The initials of the User who made the change will be displayed

Date ***(Display Only)***

The Date and Time on which the changes were made will be displayed

Item Changed ***(Display Only)***

A brief description of the Item changed will be displayed.

Change (New Value) ***(Display Only)***

The new value of the changed item will be displayed.

Old Value ***(Display Only)***

The old value of the changed item will be displayed.

To close the Works Order Audit and return to the main Works Order form press the [Close] button on the window.

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3.12.13BOQ Details

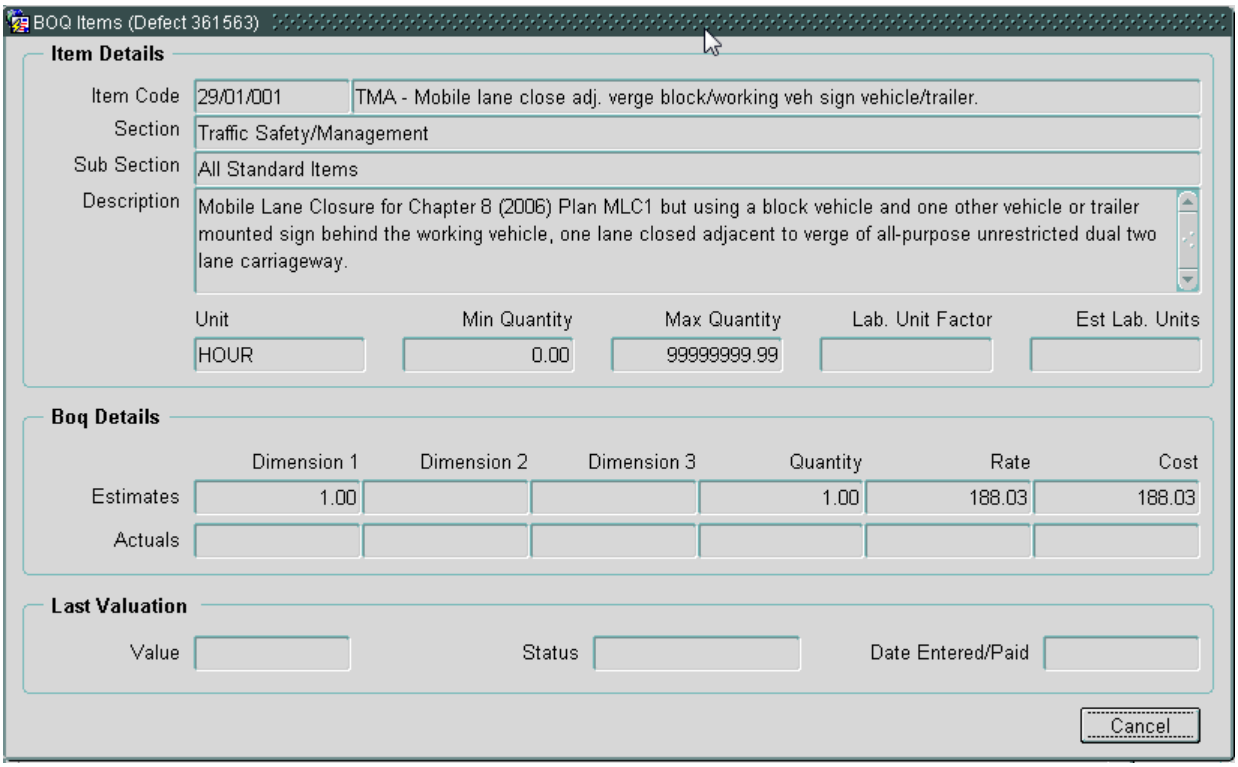

Figure 161 - BOQ Details

This window can be called by pressing the [Expand] button in the menu toolbar when a BOQ item is selected.

It is useful when entering quantities because if the items are banded, this window will show the minimum and maximum allowed values.

Details of the estimated and actual values are also displayed. If the Works Order Line on which the selected BOQ item is on, is part of an Interim Payment the Last Valuation cost, Status and the Date the Valuation was entered or the payment made will be displayed.

When entering a Valuation for an Interim Payment the Minimum Quantity limit for the Standard Item is overridden, but the Maximum Quantity limit is retained.

Select [Cancel] to return to the BOQ Items window

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3.12.14Standard Item Totals

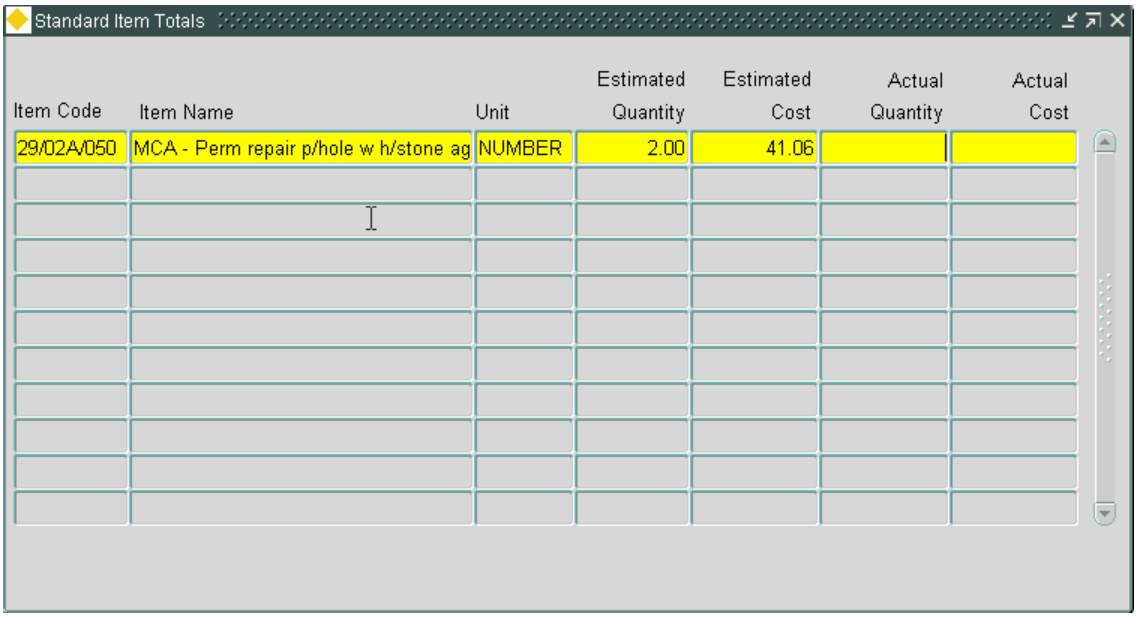

Figure 162 - Standard Item Totals

This window is displayed when the [Standard Item Totals] button is selected in the Works Orders Defects window.

It is a display only window, which shows all of the Standard Items currently on this Works Order, as well as the total quantities and costs, both estimated and actual, across the whole works order.

Note that the 'Actual' fields are only displayed after a works order line has been completed or an Interim payment made and will, therefore, initially be empty.

If the contractor has added additional items to the order the estimated values will be empty with the actual values being populated.

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3.12.15Contractor Totals

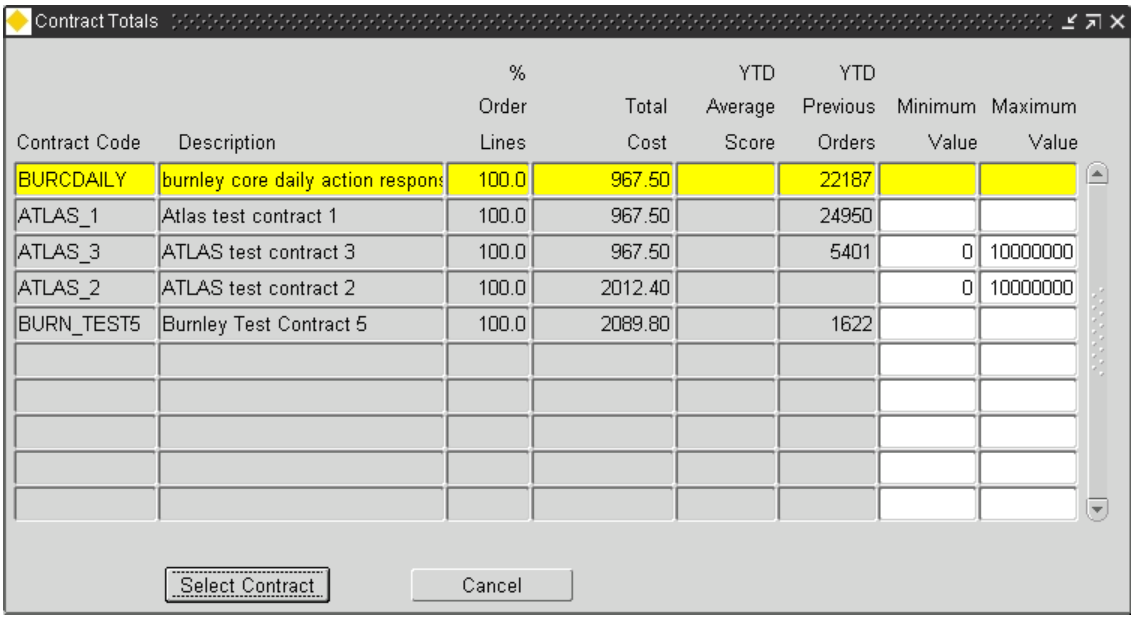

Figure 163 - Contractor Totals

This window is displayed when the [Contractor Totals] button is selected in the Works Orders Defects window.

It is a display only window which shows all contracts which can satisfy some or all of the work defined on the Works Order. For each contract, the window shows the percentage of the order lined that the contract has priced and can therefore complete, as well as the total cost where that contract is to be used. If available, the window will also show the average score achieved by that contractor over the past year to date, as well as the total value of orders placed with that contractor in the year to date.

If the Contractor has had a financial limit on Works Order values that may be issued to him imposed in Contractors – MAI3881, the Minimum and Maximum values will be displayed.

To select an alternative contract for use on this works order, highlight the required contract then select the [Select Contract] button.

If product Option WORREFGEN is set to either 'C' for 'Contract Based' Works Order Reference Number generation or 'A' for Administration Unit Works Order Reference Number Generation and the initial Contract selected is changed, the Works Order will Cancelled and an exact copy made with the new reference number being generated. The Works Order will have '**Cancelled**' appended to the start of its description.

To return to the Works Order form without selecting a Contractor press the [Cancel] button.

If the Value of the Works Order is outside the limits set for the Contractor a warning will be displayed a shown below.

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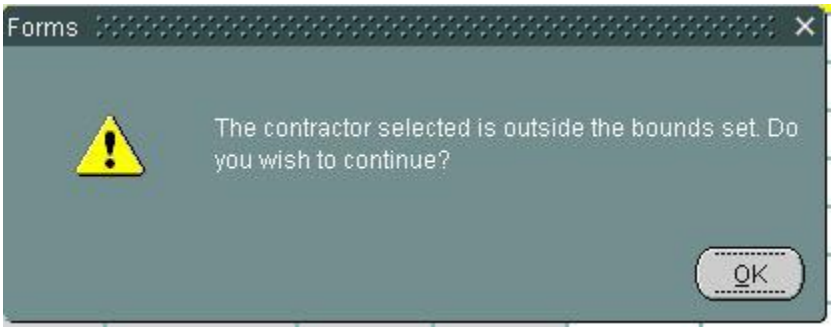

Figure 164 - Outside limit

To select the Contractor and override the warning press [OK] otherwise press [Cancel] to select an alternative Contractor.

If the Contractor selected is not the cheapest Contractor a window will appear requesting a reason as to why the cheapest Contractor was not selected. Enter the reason and press [OK] to continue with the selection.

Figure 165 - Reason

This will be displayed in the Additional Details Window.

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3.12.16Work Order Flexible Attributes

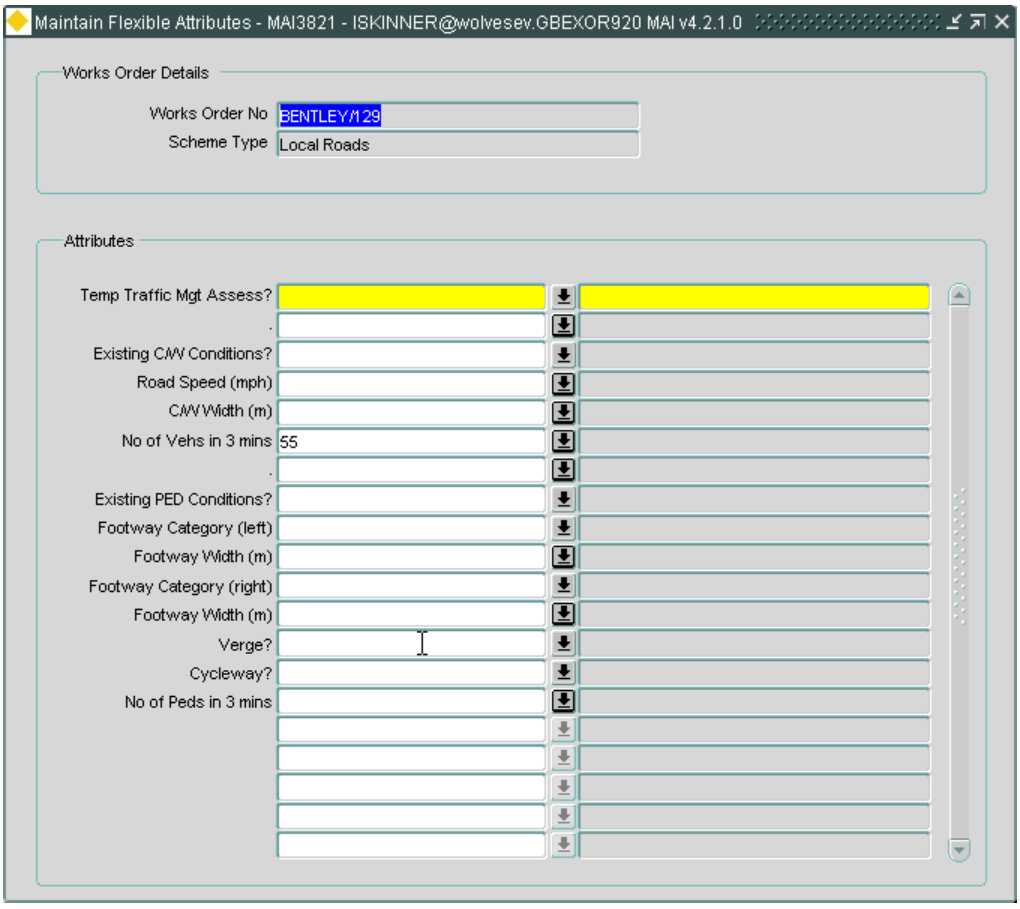

Figure 166 - Flexible Attributes

Each different type of work order may potentially require a different set of information to be held against it. To facilitate this the work order flexible attributes can be linked to individual scheme type.

This allows the customer to define a set of attributes that are specific for a small scheme work order and another set specific for cyclic work orders. The attributes are based on scheme type.

The flexible attributes are set up using the standard asset meta model module by defining a special type of asset record, this asset record is then linked to the appropriate scheme type using Application Attributes – MAI3819.

The Attributes part of the form will display the flexible attributes of the asset metamodel mapped to the scheme type used in the work order. Attribute values can be added or modified.

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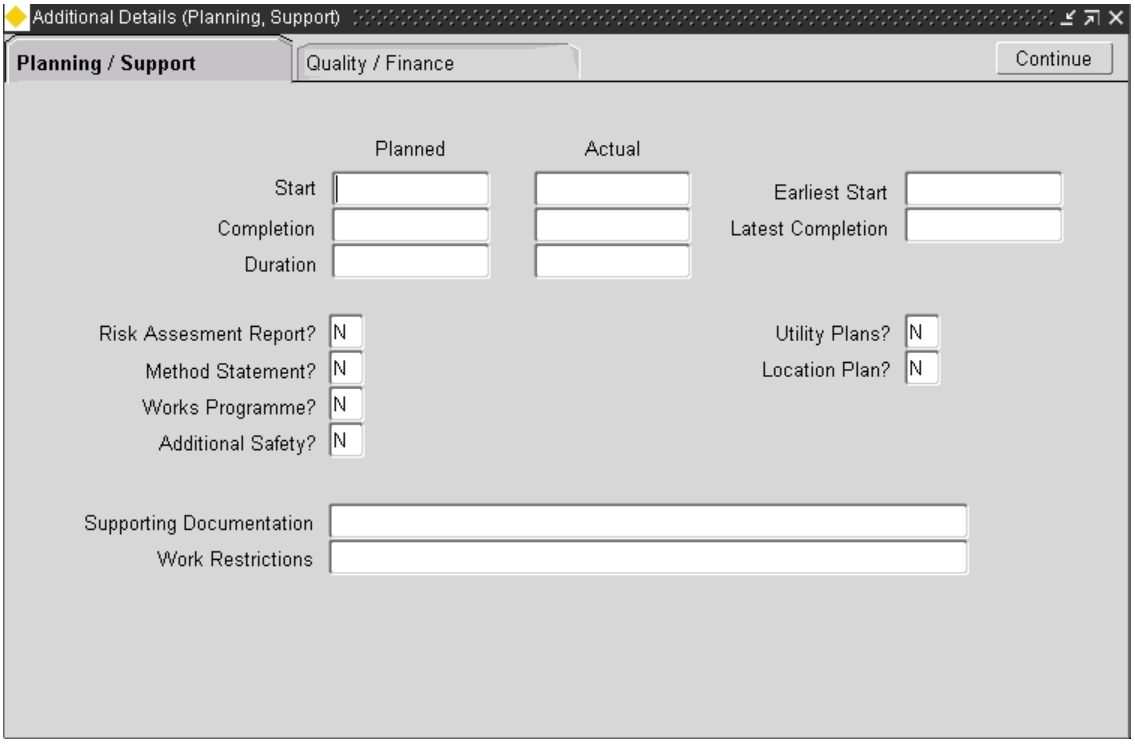

Figure 167 - Additional Details Planning/Support

3.12.17Additional Details – Planning/Support

This window is displayed when the [Additional Details] button is selected in the Works Orders window.
All the fields in this window are optional and are intended for information only.
Any documents that are to be held against a work order will be held using Document Manager.

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3.12.18Additional Details – Quality/Finance

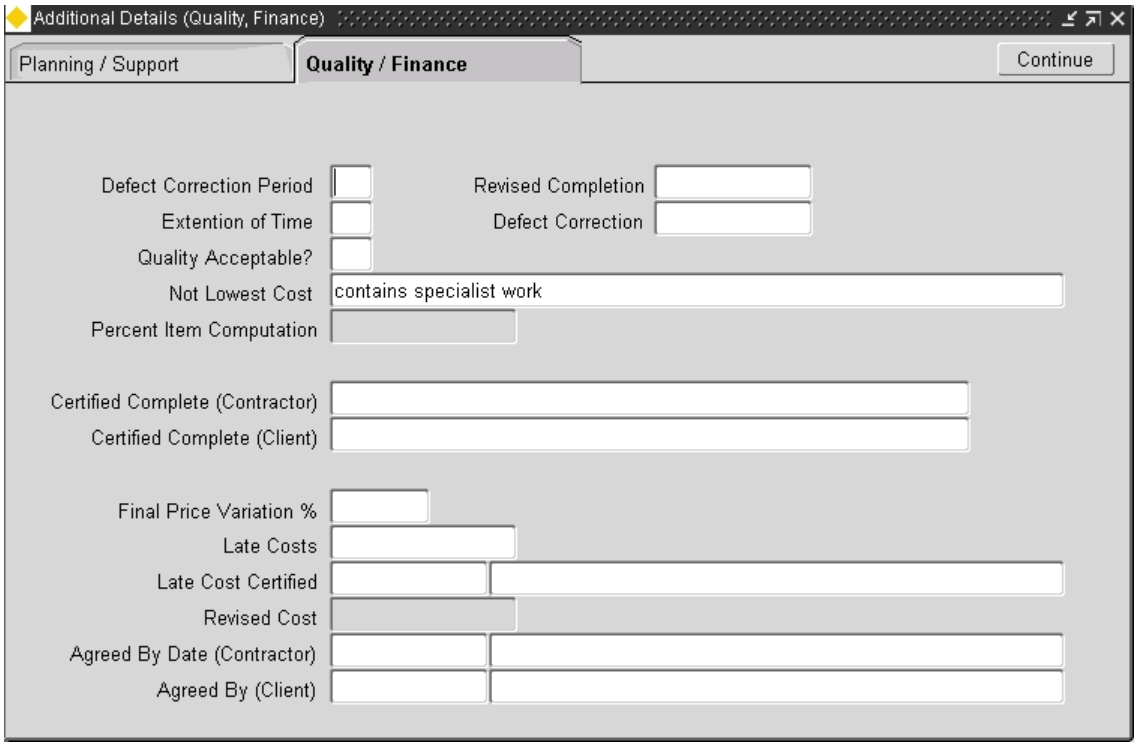

Figure 168 - Additional details Quality/Finance

This window is displayed when the [Additional Details] button is selected in the Works Orders window.

All the fields within this window with the exception of 'Not Lowest Cost' and 'Percent Item Computation' are optional for additional information only and will be included for reference on works order prints.

Not Lowest Cost ***(Display Only)***

If the Cheapest qualifying Contractor is not selected, the reason entered as to why the cheapest Contractor was not selected will be displayed.

Percent Item Computation ***(Optional)*** ***List***

The Product Option Value can be overridden by adding the required value into the 'Percent Item Computation' field in the Program details window. This will set the Computation method for any subsequent Percentage Items added to a BOQ for a Works Order line on the current Works Order, to the value entered. This allows for different Computation methods to be used without the need to edit the Product Option value.

Select [Continue] to return to the Works Orders (Defects) window.

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3.12.19Invoices

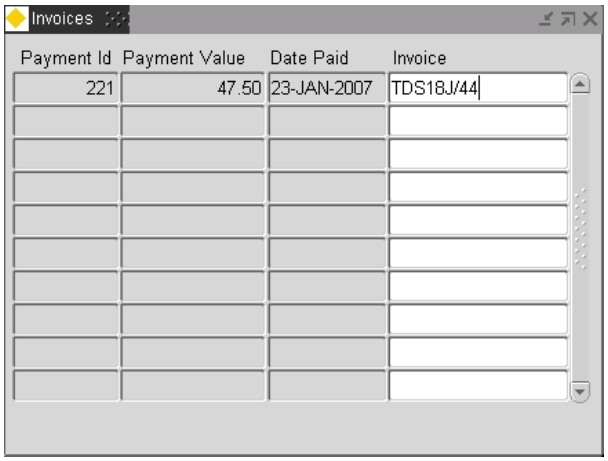

Figure 169 - Invoices

Once a Works Order Line or Part of a Works Order Line, in the case of an Interim payment, has been included in payment run the Invoice details can be displayed by pressing the [Invoices] button on the Works Order Line window.

The Payment Id, Payment Value and Date Paid will be displayed. To add the Invoice number, click in the 'Invoice field' and enter the appropriate value. Press [Save] on the menu toolbar to save the changes.

If the Works Order Line has had a number of Interim Payments made against it, this is a good way to track the payments made to date.

Press the [Close] button to return to the Works Order Line window.

3.12.20Making Interim Payments

Interim payments can be made on part of an individual Works Order Line if needed. This may used where the work ordered on a Works Order line may take a long period of time to complete or is of very high value. As work proceeds the Contractor may require payment for the work he has completed to date. Interim payments allow the Standard Items quantities to be amended to show the actual amount of work done to date or for new Standard Items to be added. Once the actual quantities have been added the Works Order Line can then be included in a payment run.

As the work progresses further, this Interim Payment process can be repeated until the work is Completed and the Final Payment is made.

If an Interim Payment is made on a Works Order Line raised to repair a defect, the defect status will be set to STR MAIN (the Status Code with feature 6 allowed).

A Works Order cannot be completed until all the Works Order Lines on the Works Order are Completed.

Interim payments can only be made on Works Orders that have the 'Interim Payment?' flag set to 'Y'. This flag can be changed at any time.

To make an Interim Payment follow this process:

Select the Works Order Line for which to make the Interim Payment.

Set the Works Order Line status to VALUATION.

The BOQ estimated quantities will be stored and Zero estimates will be displayed in their place.

Enter the actual quantities of work done to date (that this is a cumulative amount)

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Note: When entering a Valuation for an Interim Payment the Minimum Quantity limit for the Standard Item is overridden, but the Maximum Quantity limit is retained.

If required add any Percentage Items or other Standard Items needed.

Set the Works Order Line status to INTERIM.

Press the [Save] button on the menu toolbar.

The Works Order Line is now ready for part payment on the next Payment Run i.e. the work done to date will be paid, but the Works Order Line will not be Completed.

When the Works Order Line is included on a Payment Run the Status of the Works Order Line will be set to PART-PAID.

If a further Interim Payment is to be made on this Works Order Line simply repeat this process. Details of the last valuation can be seen for a BOQ item by pressing the [Expand] button on the menu toolbar when the BOQ item is selected.

3.12.21Completing a Works Order Line with an Interim Payment

In order for a Works Order to be completed, all Works Order Lines on it must be completed. If a Works Order Line has had an Interim Payment made on it, it must also be set to Complete.

If any further work has been done since the last Valuation the Works Order Line Status should be changed to COMPLETED and the Actual quantity of work done to date entered (this should be the cumulative amount of all work done), otherwise the Works Order Line will keep the same Actual amounts as for the last Valuation.

When the Works Order Line is Completed and is included in the next payment run, no payment will be made if the Actual quantities have not been changed since the last Valuation.

3.12.22Completing a Works Order

When completing a works order it is possible to update the schedule items to reflect the actual cost of repairing the defect. A works order can be partially completed by completing individual works order lines or fully completed by completing the whole works order, the limitation to completing the full works order by selecting the [Completed] button is that the costs of each individual line can not be amended to reflect the actual costs of the work.

To enter the actual cost of a works order line follow this procedure:

1. Change the status of the works order line to COMPLETED.
2. Enter the completed date.
3. Update the dimensions in the BOQ Items window to the actual dimensions.
4. Add any further BOQ items if required.
5. Save the changes

Once the changes have been saved no further changes can be made to that works order line. Once all works order lines are completed the works order will be completed.

This status can change to COMPLETED in one of two ways, they are as follows:

The [Complete] button is selected in the Works Orders Defects window. This will complete all works order lines in the current works order, the completed date will also be entered in the next field. If this method is used changes cannot be made to the actual values of the BOQ items.

The User changes the individual line to completed manually and enters a date in the next field. At this point changes can be made to the actual values of the BOQ items, these changes must be made before saving the changes.

As the works order line passes through the payments cycle the status will be updated automatically.

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3.12.23Changing a Completed Works Order

Once a Works Order or Works Order Line is complete no changes can be made to the value of the order.

If however, when it comes to payment, the Works Order or Works Order Line is held because actual values of the work are in excess of the allowable differences between estimated values and actual values, the actual values may need to be re-entered.

This is carried out with the following procedure:

1. Retrieve the completed works order that needs amending.
2. Move to the relevant works order line.
3. Change the status back to INSTRUCTED.
4. Save the change.

   This will result in the actual quantities and costs for the selected works order line being removed, the completed dates will be cleared in both the selected works order line and the main works order window and the actual costs will be updated in the works order window.

Costs will be returned to Committed from Actuals within Budgets.

Follow the procedure for completing a Works Order to enter the amended actual values.

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3.13 Works Order Line Budget Reallocation – MAI3620

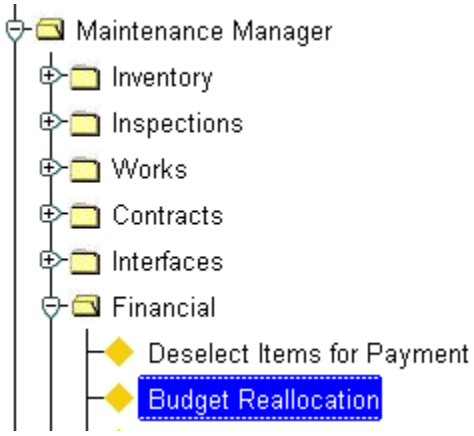

Figure 170 - Work Order Line Budget Reallocation Menu Option

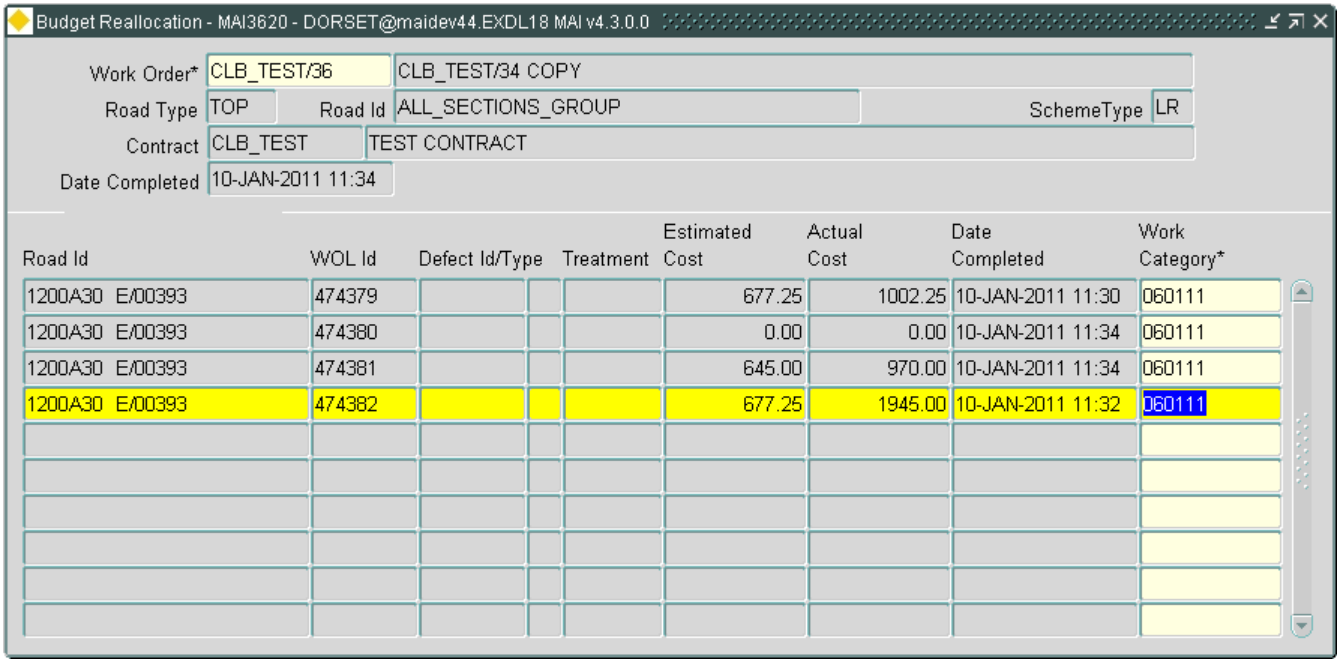
Budget Reallocation - MAI3620 - DORSET@maidev44.EXDL18 MAI v4.3.0.0
Work Order* CLB_TEST/36 CLB_TEST/34 COPY
Road Type TOP Road Id ALL_SECTIONS_GROUP SchemeType LR
Contract CLB_TEST TEST CONTRACT
Date Completed 10-JAN-2011 11:34
Road Id | WOL Id | Defect Id/Type | Treatment | Estimated Cost | Actual Cost | Date Completed | Work Category*
1200A30 E/00393 | 474379 | 677.25 | 1002.25 | 10-JAN-2011 11:30 | 060111
1200A30 E/00393 | 474380 | 0.00 | 0.00 | 10-JAN-2011 11:34 | 060111
1200A30 E/00393 | 474381 | 645.00 | 970.00 | 10-JAN-2011 11:34 | 060111
1200A30 E/00393 | 474382 | 677.25 | 1945.00 | 10-JAN-2011 11:32 | 060111

Figure 171 - Work Order Line Budget Reallocation

3.13.1 General Information

This form allows the User to query any completed Works Order and amend the Budget (Work Category) on each individual Works Order Line to another appropriate budget.

The selected Budget must satisfy the following criteria:

- There must be sufficient balance available to accommodate the Actual Cost of the Works Order Line.
- The Financial Year must be either the same as that of the original Budget or the following Financial Year.

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- Must satisfy the normal validation that would be applied by the Works Orders form (MAI3800)

When a Budget change is performed the Actual Cost of the Works Order Line will be removed from the original Budget and added to the new Budget.

The top part of the form is query only.

The bottom part of the form is display only with the exception of:

Work Category	***(Optional)***	***List***

Enter the amended budget for the selected work order line.

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3.14 Gang/Crew Allocation – MAI3805

Figure 172 - Gang/Crew Allocation Menu Option

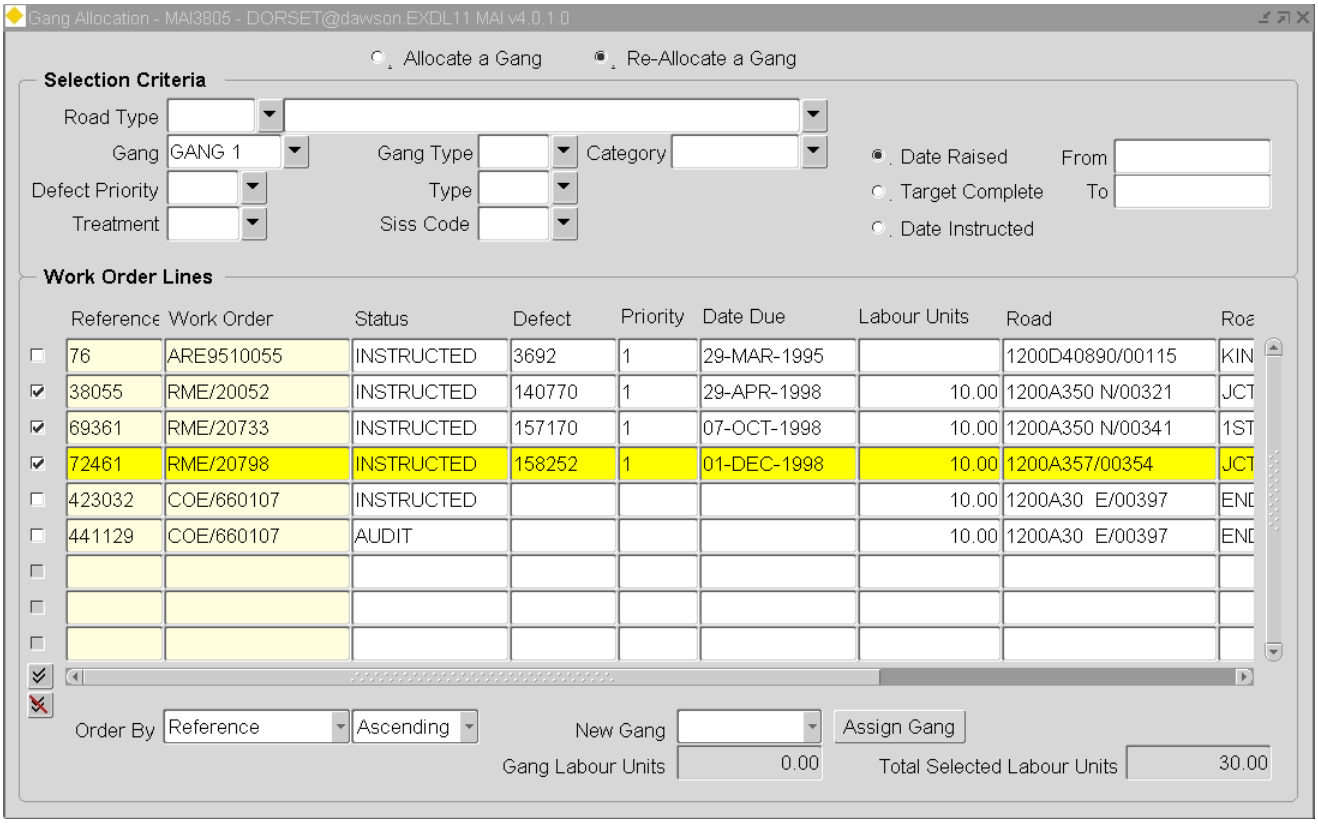

Figure 173 - Gang/Crew Allocation

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3.14.1 General Information

Once a work order has been raised and issued by the client the contractor may wish to organize that work in their own way to suit the skill set of their own work gangs.

This form is designed to allow the association of work order lines to individual work gangs as well as re-allocating work between gangs.

The product option GANGENABLE will be set to 'Y' to allow the use of gangs. Once set, additional fields will be displayed in Work Orders (Defects) – MAI3800 in both the work order line and the selection criteria windows and Work Order – Contractor Interface – MAI3802 in the work order lines window.

Each appropriate schedule of rates item can have a Gang Work Type associated with it using Standard Items – MAI3888. This allows the grouping of item according to the type of work associated with a defect. The association of the gang work type will aid in the selection criteria of the works orders when locating defects.

Gang Work Types are set up in Domains – HIG9120 in the GANG_WORK_TYPE domain.

Gangs are set up in Domains – HIG9120 in the GANG domain.

This form can be used in 2 modes depending on the checkbox selected.

1. Allocate a Gang checkbox, this gives the user the ability to restrict the work order lines retrieved using the selection criteria, select the lines required then allocate a gang to those lines.
2. Re-allocate a Gang checkbox, this substitutes the Status field with the Gang field allowing the user to retrieve work order lines already allocated to a gang, select the lines required then re-allocate them to another gang. The lines retrieved can be further restricted by the selection of other criteria.

3.14.2 Selection Criteria

These fields are used to restrict the work order lines retrieved in the work order lines block, the more fields entered the more restrictions will be applied. Making no selections in this block will retrieve all unallocated works order lines in the next block.

Road Type ***(Optional)*** ***List***

The road type entered here will restrict the road groups displayed in the adjacent field

Road Id ***(Optional)*** ***Gaz***

Enter the required road group that is to be used to restrict the works order lines retrieved.

Status ***(Optional)*** ***List***

This field will be displayed when the Allocate Gang checkbox is selected. Enter a status Code.

The status code is unrestricted allowing this form to also be used for general work order queries.

Gang ***(Optional)*** ***List***

This field will be displayed when the Allocate Gang checkbox is selected.

Enter the gang details that are to have lines re-allocated to another gang.

Gangs are set up in Domains – HIG9120 in the GANG domain.

Defect Priority ***(Optional)*** ***List***

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Enter the defect priority code.

Treatment ***(Optional)*** ***List***

Enter the treatment code.

Gang Type ***(Optional)*** ***List***

Enter the Gang work type.
Gang Work Types are set up in Domains – HIG9120 in the GANG_WORK_TYPE domain.

SISS Code ***(Optional)*** ***List***

Enter a Standard Item Sub Section code.

Date Raised

Target Complete

Date Instructed ***(Optional)***

Select the checkbox to include a date search on the work order dates below.

Date From ***(Optional,)***

Enter the date from which you wish to make a search. This field can be used in conjunction with the next field for searching for defects in a date range.

Date To ***(Optional. Default)***

Enter the date to which you wish to search for defects, default is 7 days after the Date From.

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3.14.3 Work Order Lines

The contents of this window will be either

1. All un-allocated works order lines or
2. All lines allocated to the selected gang

This will depend upon the selection criteria entered previously.

All fields in this window are display only, select the checkbox for the work order lines that are to be selected followed by the [Assign Gang] button.

Selecting a work order line followed by [Expand] will display Works Orders – MAI3800 and will be the complete work order containing the line selected.

The button will select all lines in this window.

The button will de-select all selected lines.

The scroll bar along the bottom of the window allows the user to view all available fields.

Order By ***(Optional)*** ***List***

These two fields allow the ordering of the work order lines details.

New Gang ***(Optional)*** ***List***

Enter the gang to which the selected lines are to be Allocated/Re-allocated followed by the [Assign Gang] button.

Gang Labour Units ***(Display Only)***

This is the Total Labour Units of ALL work order lines assigned to the selected gang where the Work Order Line status is 'Instructed'. This is used to display the total Labour Units for all outstanding work allocated to a Gang.

Total Selected Labour Units ***(Display Only)***

This is the Total Sum of Labour Units of the selected WO Lines in the 'Work Order Lines' block of the form.

The Gang Labour Units and Total Labour Units summary fields are to allow the assignment of Work Orders to a gang based upon the number of Labour Units a Gang can complete in a standard working day.

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3.15 Cancel Works Orders – MAI3610

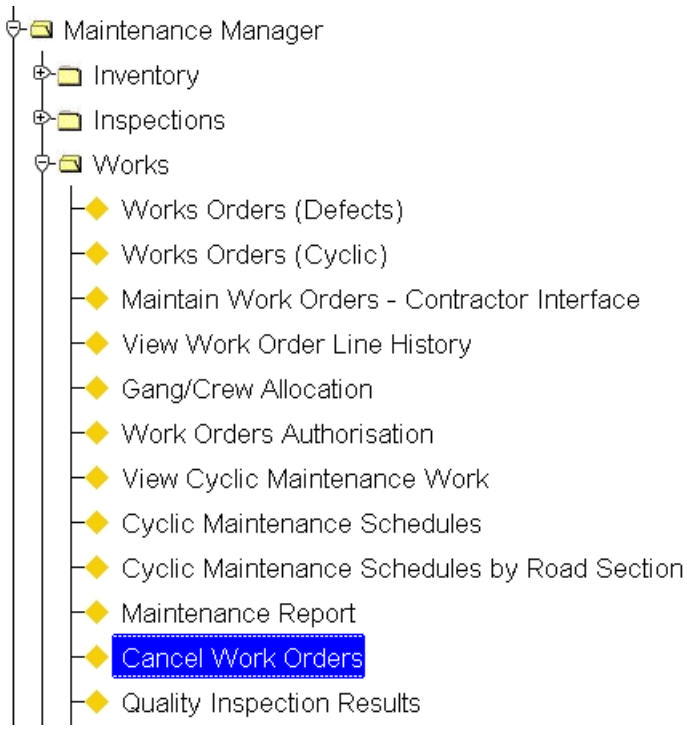

Figure 174 - Cancel Works Orders Menu Option

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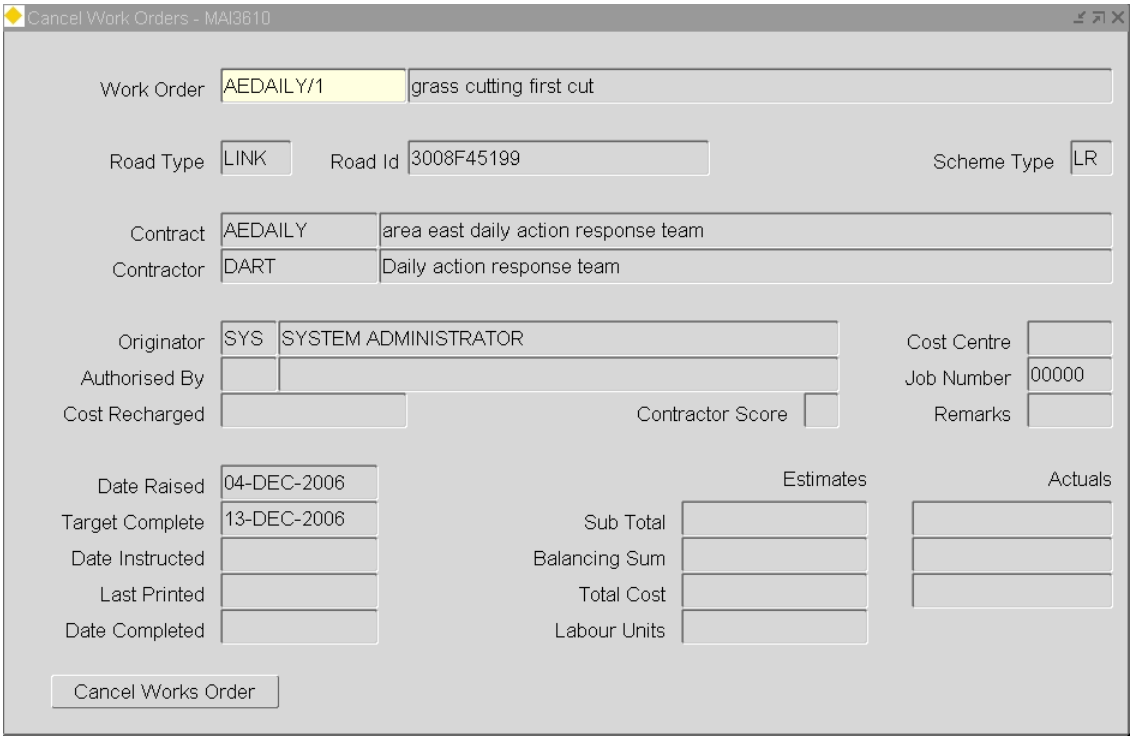

Figure 175 - Cancel Work Order

3.15.1 General Information

This option is the only means of cancelling a works order (Works Orders are also marked as **Cancelled** if the selected Contract is changed on the Works Order form).

When a works order is cancelled, it can be viewed using the form Works Orders – MAI3800. If you view this cancelled works order you will notice it has **Cancelled** in the description text and will have been marked as completed on today's date. This is only there for historical purposes and cannot be used. Historical works orders are useful when querying contractor details and monitoring a contractor's performance over previous financial years.

Only orders that have not been completed can be cancelled.

Once the works order has been cancelled it will also do the following:

Release the Works Order Lines, i.e. any defects associated with this works order will return to the pool of defects ready to be picked up on another works order for completion, i.e. the defects status will be set to AVAILABLE.

Cyclic maintenance activities on the cancelled works order will be released.

Any figure that has been committed to a budget will be released and returned to the budget.

Once you have queried back the order to be cancelled press the [Cancel Works Order] button followed by the save button in the toolbar.

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3.16 Quality Inspection Results – MAI3820

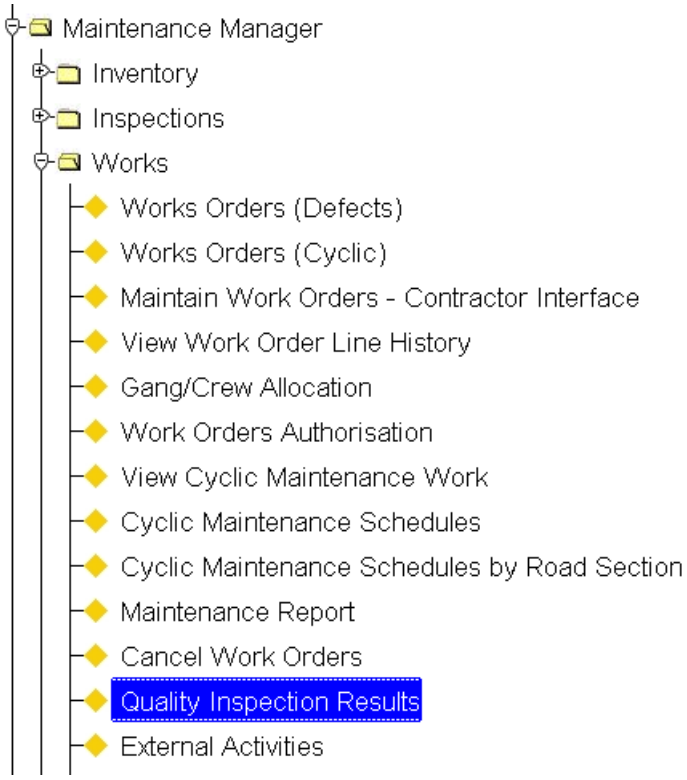

Figure 176 - Quality Inspection Results Menu Option

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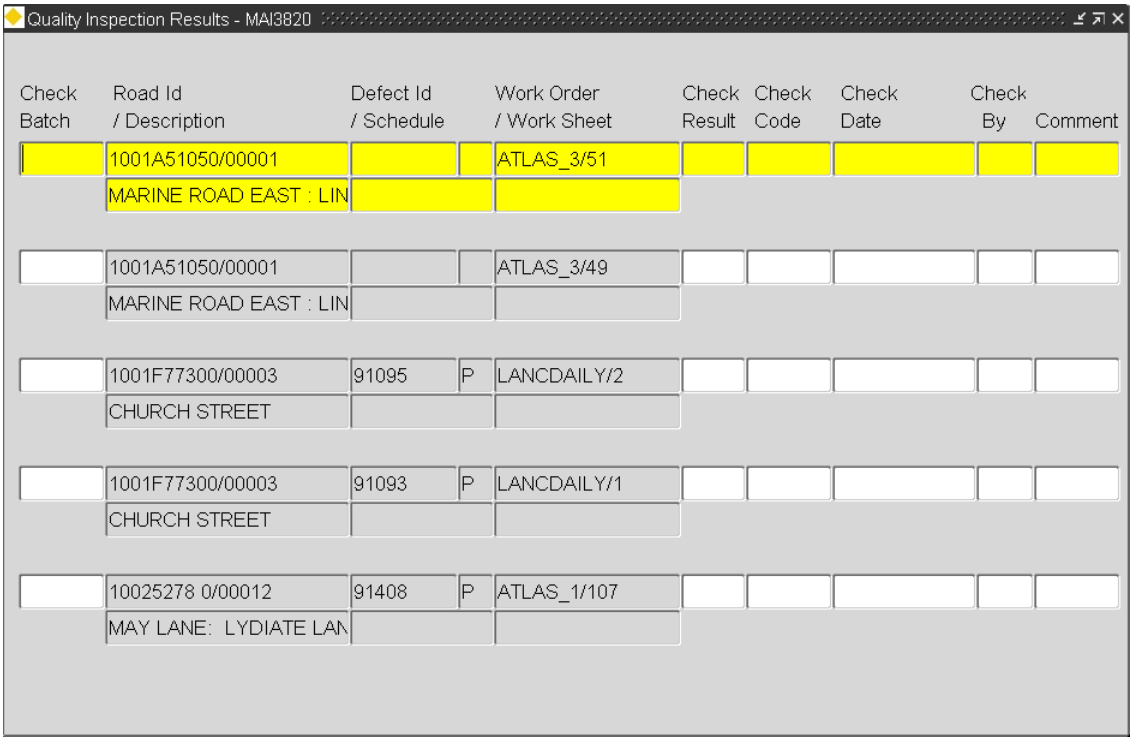

Figure 177 - Quality Inspection Results

3.16.1 General Information

This option is used to record the results of Quality Inspections carried out on completed Work Order Lines. Works Order Lines are only displayed on this form if they have been selected during the running of report 'Work for Quality Inspection – MAI3950' . Once Quality Inspection results have been updated using this form they can be reported on using 'Quality Inspection Performance – MAI3952'.

3.16.2 Work Order Lines

When you enter this window it will be in query mode, enter your selection criteria followed by [Execute Query] to return the required works order line details. Quality Inspections can be queried on Check Batch, Road Id, Defect Id, Schedule Id, Works Order Number or any combination of these fields.

Check Batch ***(Display Only)*** ***List***

Displays the Check Batch number generated during the running of report 'Work for Quality Inspection – MAI3950'. List is only available in query mode.

Road Id/Desc ***(Display Only)***

Displays the section ID and description of the road section to which this works order relates.

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Defect Id ***(Display Only)***

Displays the unique ID of the defect which this works order was rectifying.

Schedule ***(Display Only)***

For cyclic maintenance works orders, this field displays the ID of the schedule under which this works order was created.

Work Order ***(Display Only)***

Displays the reference number of this works order.

Work Sheet ***(Display Only)***

Displays the serial number of the worksheet.

Check Result ***(Optional)*** ***List***

Enter the result of the inspection..

Check Code ***(Optional)*** ***List***

If the inspection result is 'Fail' enter the appropriate code to define the reason for the failure. These values are amended in Domains – HIG9120 and by editing Domain CHECK_CODE.

Check Date ***(Optional)***

Enter the date the Quality Inspection was carried out.

Check By ***(Optional)*** ***List***

Enter the Initials of the supervisor who conducted the Quality Inspection.

Comments ***(Optional, Edit)***

Enter any required comments.

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3.17 External Activity – MAI1280

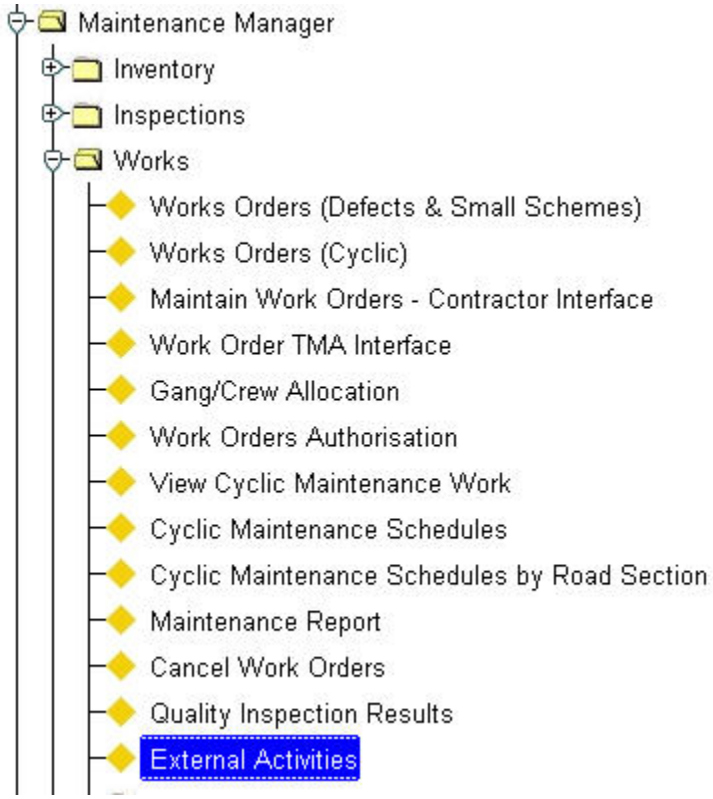

Figure 178 - External Activities Menu Option

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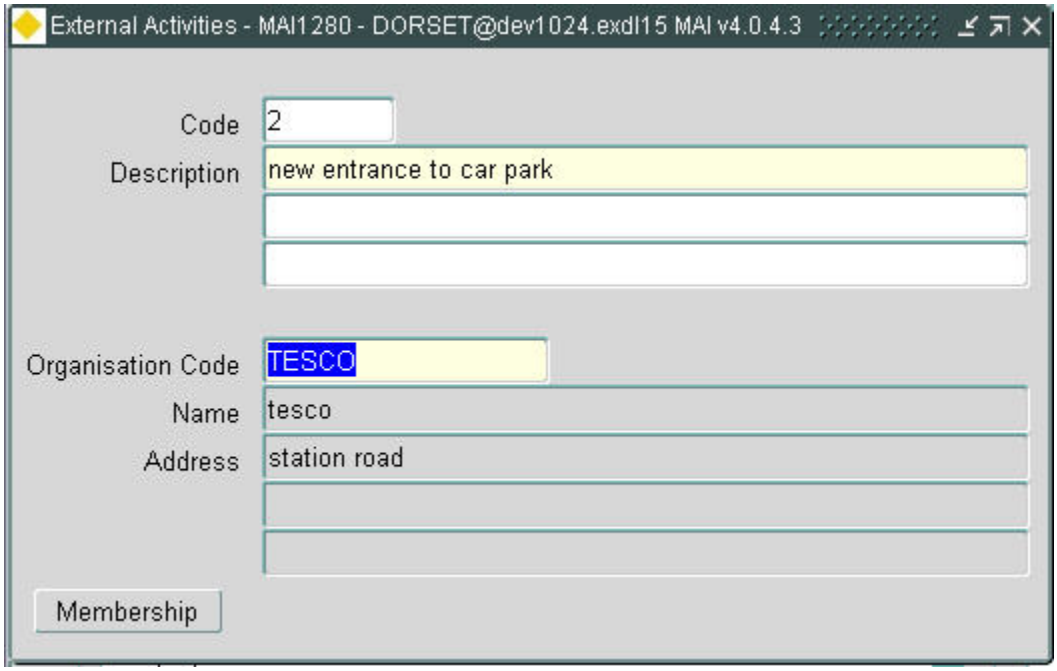

Figure 179 - External Activity

3.17.1 General Information

When activities are carried out on road sections by external organisation units, they should be recorded within the system to enable engineers to assess the implications of any planned maintenance. For example, if the Gas Board is due to replace a main, it is pointless to resurface the road first.

These activities will be flagged as external activities in the work order line description when a work order is raised.

3.17.2 External Activity

When you enter this form the cursor sits in the 'Code' field waiting for you to enter your selection. Press [Execute Query] to obtain existing information.

Code ***(Optional)***

Enter the external activity code that is to be set up. This will be used to reference standard external activities.

Description ***(Required)***

Enter a description of the external activity.

Organisation Code ***(Required)*** ***List***

Enter the identifier of the organisation performing the external activity. The organisation will have been set up using Organisations – MAI1870.

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Name ***(Display Only)***

The organisations name will be displayed.

Address ***(Display Only)***

The organisations address will be displayed.

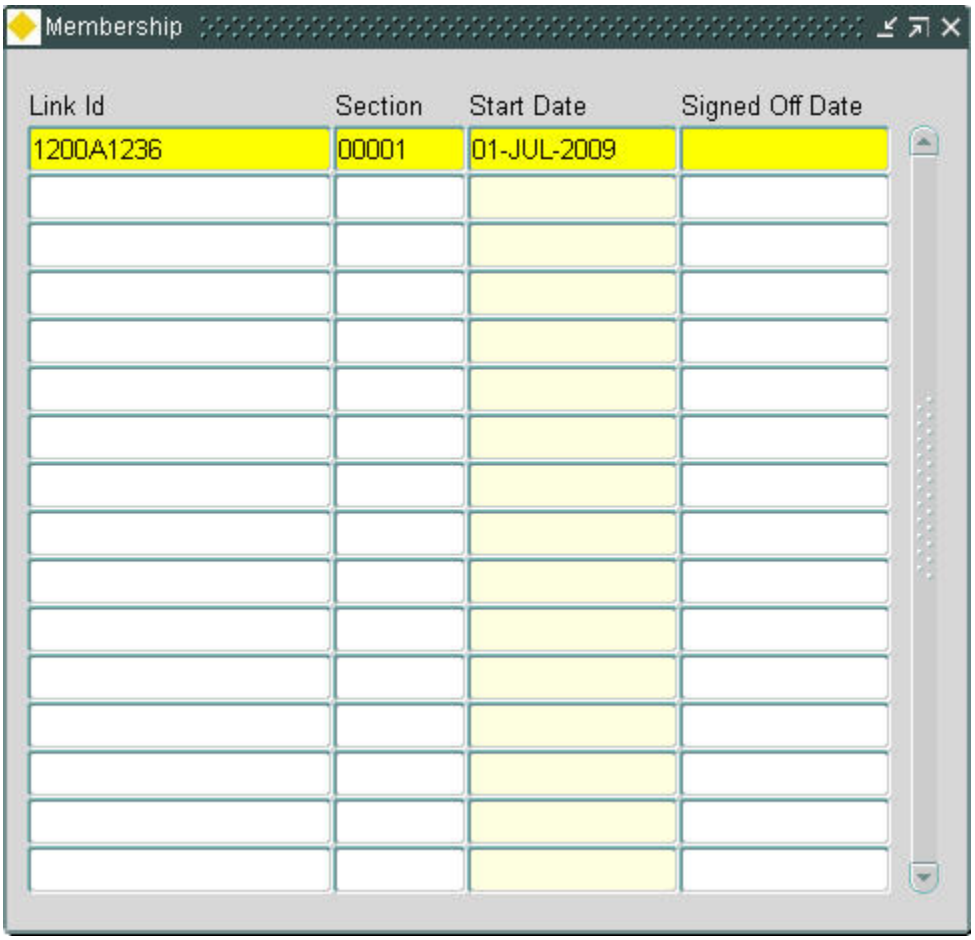

Figure 180 - Membership

3.17.3 Membership

This window is used to maintain the links and dates associated with the external activity.

Link Id ***(Required)*** ***List***

Enter the linkcode for the required section.

Section ***(Required)*** ***List***

Enter the section number

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Start Date ***(Required)***

Enter the date the external activity is due to start

Signed Off Date ***(Optional)***

Enter the date the activity has been completed or signed off.

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4 Works Ordering Reports

This chapter provides examples and the required selection criteria for the Works Ordering and associated Reports.

The reports illustrated in this chapter are:

- Work Order (Unpriced) – MAI3485
- Work Order (Priced) – MAI3480
- BOQ Work Order (Defects) – MAI3800
- Work Orders (Detail) – MAI3500
- Work Orders (Summary) – MAI3505
- Work Orders (NMA Format) – MAI3909
- Work Orders (Enhanced Format) – MAI3919
- Work Orders (Strip Plan) – MAI5130
- Review Raised Work Orders – MAI3490
- Defects Not Yet Instructed – MAI3922
- Summary of Defects Not Yet Instructed – MAI3920
- Instructed Work by Status – MAI3924
- Instructed Defects due for Completion – MAI3926
- Inventory Updates – MAI3930
- Work for Quality Inspection – MAI3950
- Quality Inspection Performance – MAI3952
- Admin Unit Performance – MAI3956

4.1 Running Reports

The majority of reports within highways by exor are accessed using a standard window called the Generic Reporting Interface (GRI). Whilst the selection criteria for each report will change from report to report, the way the reports are run, viewed and printed remains constant.

Below is an example of the Generic Reporting Interface.

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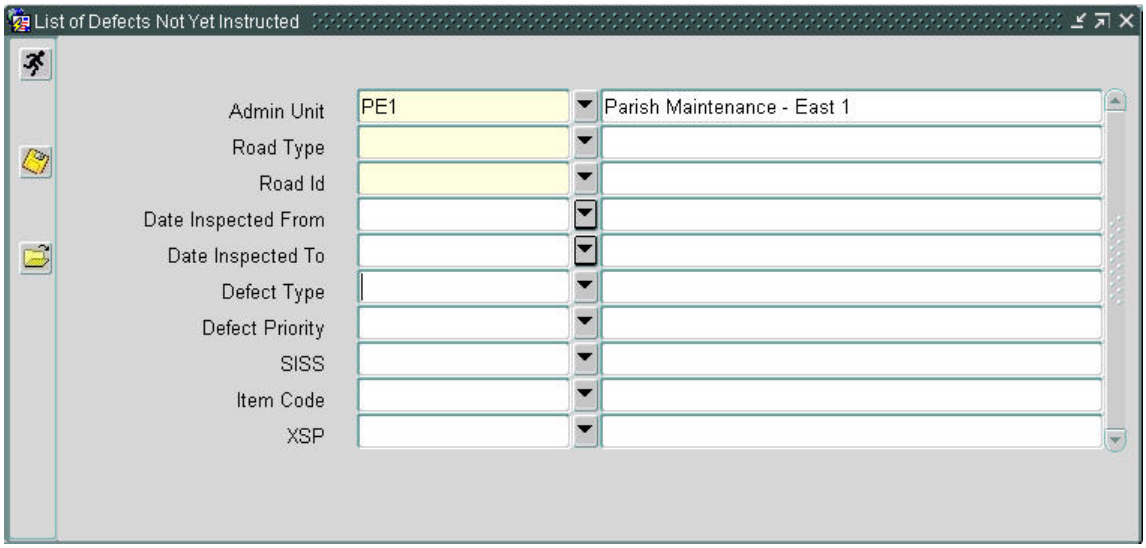

Figure 181 - GRI

The title of the report is displayed at the top of the window.

There are three buttons down the left hand side, they are as follows:

Run report. When the selection criteria has been entered, this will run the report and place the output in the report previewer.

Save Parameters. The Parameters for reports that have to be constantly re-run or have complex selection criteria can be saved to a file and re-used. You will be prompted to enter a file name. Each user can have their own set of saved parameters.

Load Parameters. Previously saved parameters for the selected report can be loaded directly into the GRI. You will be prompted to enter a file name, if you have a number of saved parameters, double clicking the field will result in a list of saved parameters being displayed.

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4.2 Work Order (Unpriced) – MAI3485

Purpose:

This option produces a 3-part report. The first provides an unpriced Work Order for the selected Works Order Number and includes the following information on each Works Order Line:

- WO Line Number
- Link Number
- Road Section Number
- Start and End Chainage of Defect on W.O. Line
- XSP of Defect on W.O. Line
- Item Type
- Repair Description
- Unit (Flexible attribute)
- Order Quantity
- Rate
- Discount %
- Order Value

The Second part provides a summary of the Road Sections on the Selected Works Order and includes the following information:

- Agency Code
- Link Code
- Road Section Number
- Section Class
- Road Section Description

The third part provides a list of Cross Sectional Positions (XSP's) on the Road Sections selected on the chosen Works Order.

4.2.1 Selection Parameters

Works Order No ***(Required)***

Enter the Works Order Number to be reported on.

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4.2.2 Works Order (Unpriced) – MAI3485

LIVE2108 LIVE2108 NORTH PENNINE LINK GROUP Date: 20 DEC 1999
MAI3485 Print Works Order (Unpriced) Page: 1

DTp/Local	Agency	LINK	Job Code	Item Code	Year	Works Order No
DTp		2900A69 1		020401	1999	2/00003

TO BE COMPLETED IN: 24hrs 7days 28days Other
Raised by :
Authorised by :
Completed by: _____ Date : 23-NOV-99
Date : 16-APR-96
To :
Date Completed 23-NOV-99 Time Completed
Signed for Contractor_____
Signed for Client_____
DESCRIPTION OF WORK: Emergency Repairs to Safety Fence Signs & Manhole
Works Order Total :

Item No.	Link	Section	Chainage Start	Chainage End	XSP	Item Type	Description	Unit	Order Qty.	Rate	Disc %	Order Value
1	A69 1	10	19	0	3	/	No Action	defect descr	0			
2	A69 1	24	15	0	3	/	No Action	defect descr	0			

Figure 182 - Part 1

LIVE2108 LIVE2108 NORTH PENNINE LINK GROUP Date: 20 DEC 1999
MAI3485 Print Works Order (Unpriced) Page: 1

DTp/Local	Agency	LINK	Job Code	Item Code	Year	Works Order No
DTp		2900A69 1		020401	1999	2/00003

TO BE COMPLETED IN: 24hrs 7days 28days Other
Raised by :
Authorised by :
Completed by: _____ Date : 23-NOV-99
Date : 16-APR-96
To :
Date Completed 23-NOV-99 Time Completed
Signed for Contractor_____
Signed for Client_____
DESCRIPTION OF WORK: Emergency Repairs to Safety Fence Signs & Manhole
Works Order Total :

Item No.	Link	Section	Chainage Start	Chainage End	XSP	Item Type	Description	Unit	Order Qty.	Rate	Disc %	Order Value
1	A69 1	10	19	0	3	/	No Action	defect descr	0			
2	A69 1	24	15	0	3	/	No Action	defect descr	0			

Figure 183 - Part 2

LIVE2108 LIVE2108 NORTH PENNINE LINK GROUP Date: 20 DEC 1999
MAI3485 Print Works Order (Unpriced) Page: 2

DTp/Local	Agency	LINK	Job Code	Item Code	Year	Works Order No
DTp		2900A69 1		020401	1999	2/00003

Road Sections on Works Order 2/00003

Agency	Link	Section	Section Class	Description
2900	A69 1	10	All Purpose	GREENHEAD DUALING EASTBOUND FROM B630
2900	A69 1	24	All Purpose	C302HALTWHISTLE(E) TO U7051 MELKRIDGE(N)

Figure 184 - Part 3

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4.3 Work Order (Priced) – MAI3480

Purpose:

This option produces a 2-part report. The first provides a Priced Works Order and includes the following information on each Works Order Line:

- Works Order Line Number
- Link Id
- Road Section Number
- Road Section Description
- Defect Type
- XSP and Chainage of Defect
- Inspection Activity
- Treatment Type
- Repair Description
- Defect Id
- Unit
- Quantity
- Estimated Rate for Works Order Line
- Estimated Value of Works Order Line

The Second part provides a summary of the Road Sections on the Selected Works Order and includes the following information:

- Agency Code
- Link Code
- Road Section Number
- Section Class
- Road Section Description

4.3.1 Selection Parameters

Works Order No ***(Required)***

Enter the Works Order Number to be reported on.

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LIVE2108 LIVE2108 NORTH PENNINE LINK GROUP Date: 20 DEC 1999
MAI3480 Print Works Order (Priced) Page: 1

DTp/Local	Agency	Road Group	Expenditure Code	Item Code	Year	Works Order No
DTp		2900A69 1		020401	1999	2/00003

TO BE COMPLETED IN: 24hrs 28days 3 months Other

Raised by: Information Management Date: 16-APR-96
Authorised by: Dave Pearson
Completed by: _____ Date: 23-NOV-99

To: Northumberland Contracting
Date Comp. 23-NOV-99 Time Comp.
Signed for Contractor _____
Signed for Client _____

DESCRIPTION OF WORK: Emergency Repairs to Safety Fence Signs & Manhole Safety Fencing
In Accordance With Term Highways Maintenance Contract

Sub Total: 0.00
Balancing Sum: 0.00
Works Order Total: 0.00

Item No.	Link Id	Section	Defect Location Details	Repair Description Details	Unit	Qty	Est Rate	Est Value
1	2900A69 1	10	GREENHEAD DUALING EASTBOUND FROM B630 B630 JUNCTION OTHR-Other XSP 3 Chain 19	FB - / No Action RENEW 4 BEAMS STRAIGHTEN POSTS Defect Id :3	Unknown	0	0.00	0.00
2	2900A69 1	24	C302HALTWHISTLE(E) TO U7051 MELKRIDGE(N) TOWNFOOT JUNCTION OTHR-Other XSP 3 Chain 15	SG - / No Action RENEW 1 BOLLARD SHELL Defect Id :4	Unknown	0	0.00	0.00

Figure 185 - Work Order (Priced) – MAI3480, Part 1

LIVE2108 LIVE2108 NORTH PENNINE LINK GROUP Date: 20 DEC 1999
MAI3480 Print Works Order (Priced) Page: 2

DTp/Local	Agency	Road Group	Expenditure Code	Item Code	Year	Works Order No
DTp		2900A69 1		020401	1999	2/00003

Road Sections on Works Order 2/00003

Agency	Link	Section	Section Class	Description
2900	A69 1	10	All Purpose	GREENHEAD DUALING EASTBOUND FROM B630
2900	A69 1	24	All Purpose	C302HALTWHISTLE(E) TO U7051 MELKRIDGE(N)

Figure 186 - Work Order (Priced) – MAI3480, Part 2

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4.4 BOQ Work Order (Defects) – MAI3906

Purpose:

This report produces a detailed Work Order, which includes any Bill of Quantity items specified, for Work Order Lines on the Selected Works Order. You may choose to print Labour Units and/or target repair dates for each Work Order Line using the appropriate Selection Parameters. You may also choose to print only the Work Order, only a Control Sheet for the Work Order or both.

4.4.1 Selection Parameters

Work Order No ***(Required)*** ***List***

Enter the Works Order Number to be reported on.

Work Sheet No ***(Optional)***

To reprint part of an already printed Work Order, enter the Work Sheet Number to be reprinted. This appears near the top of each Sheet.

Print Lab Units (Y/N) ***(Required, Default)*** ***List***

Enter 'Y' to include the number of Labour Units needed to complete a Bill of Quantity Item on a Works Order Line or 'N' to not include Labour Units. The default value is 'N'.

Print Target Repair Dates ***(Required, Default)*** ***List***

Enter 'Y' to include the target repair date for a Work Order Line or 'N' to omit this detail. The default value is 'N'.

Wrks ord/Ctrl sht/Both ***(Required, Default)*** ***List***

Enter 'W' to print only the Work Order, 'C' to print only the Control Sheet for a Work Order or 'B' to print both.

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4.4.2 BOQ Work Order (Defects) – MAI3906

EXOR2204 DEMO COUNTY COUNCIL Date: 05 SEP 2000
MAI3906 **Print BOQ Work Order (Defects)** Page: 1 of 1

Admin Unit : DEMO COUNTY COUNCIL
Contractor : TCS001 Stewart & Sons Engineering
Contract : STEWART01 Bitmac Patching 2000

Work Order No : STEWART01/3 Work Sheet No : 1
Works Description : Bitmac PAtching Area 21 North

Road Id	Road Group	Road Description
DEMOA12345/01	DEMOA01939	HIGH STREET FROM CHURCH LANE TO UPPER MILL STREET

Location : Small Scheme
Description : No recorded defect

Item : D21011 CW/FW Bitmac Patch 75 - 100mmm deep
1.00 * 80.00 * = 80.00 SQ.M

Item : 1_PERCENT A Percent Item
0.00 * * = 0.00 PERCENT

Signed_____ Completion Date_____

Road Id	Road Group	Road Description
DEMOA12345/01	DEMOA12345	HIGH STREET FROM CHURCH LANE TO UPPER MILL STREET

Location : Small Scheme
Description : No recorded defect

Item : D21011 CW/FW Bitmac Patch 75 - 100mmm deep
1.00 * 80.00 * = 80.00 SQ.M

Item : 1_PERCENT A Percent Item
0.00 * * = 0.00 PERCENT

Signed_____ Completion Date_____

Figure 187 - Work Order

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EXOR2204 DEMO COUNTY COUNCIL Date: 05 SEP 2000
MAI3906 **Print BOQ Work Order (Defects)** Page: 1 of 1

Control Sheet (Defects)

Contractor: 15 Stewart & Sons Engineering
Contract: 13 Bitmac Patching 2000

Work Order : STEWART01/3 Date Issued..... Est Comp Date:

Sheet	Defect Id	Priority	Location						Target Date
Item Code		Quantity	Unit	Labour Units	Repaired	Squad	Ret	Comments	

Figure 188 - Control Sheet

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4.5 Work Order (Detail) – MAI3500

Purpose:

This report displays a summary of each Works Order Line on the selected Works Order and provides detailed information about the defect associated with a Works Order Line. The following information is displayed:

- Link and Section Id
- Road Section Description
- Road Section Length
- Defect Chainage
- Defect XSP
- Defect Id
- Defect Description
- Attribute Name and Value
- Treatment Code
- Repair Description
- Due Completion Date

The Total Estimated Cost and Total Actual Cost of the selected Works Order is also displayed on the front cover sheet.

4.5.1 Selection Parameters

Works Order No ***(Required)***

Enter the Works Order Number to be reported on.

4.5.2 Works Order (Detail) – MA3500

LIVE2108 MAI3500 LIVE2108 NORTH PENNINE LINK GROUP Print Works Orders Detail Date: 21 DEC 1999 Page: 1

Chainage	XSP	Defect Id.	Defect Description	Attribute Name	Attribute Value	Treatment Code	Description	Location	Due/Comp. Date
Section	2900A69 1	/ 10	GREENHEAD DUALING EASTBOUND FROM B630					Length 205	
19	3	3	pothole 3*2*.50			/	RENEW 4 BEAMS STRAIGHTEN POSTS	pothole 3*2*.50	17-APR-96
Section	2900A69 1	/ 24	C302HALTWHISTLE(E) TO U7051 MELKRIDGE(N)					Length 2330	
15	3	4				/	RENEW 1 BOLLARD SHELL		17-APR-96

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4.6 Works Order Summary – MAI3505

Purpose:

This report produces a summary of all Works Orders which meet the required selection parameters for the selected Road Group. The Total Estimated Cost and Total Actual Cost of all qualifying Work Orders is also calculated. The following information is displayed:

- Work Order Number
- Road Part/Link Id
- Scheme Type
- Work Order Description
- Estimated Cost of Work Order
- Actual Cost of Work Order
- Date Instructed
- Date Completed
- Date Last Printed
- Raised By
- Number of Defects
- Total Estimated Cost of all qualifying Work Orders
- Total Actual Cost of all qualifying Work Orders

4.6.1 Selection Parameters

Admin Unit	***(Required, Default)***	***List***

Select an administrational unit to be used for this report. The default is the Admin Unit assigned to the current User.

Road Id	***(Required)***	***List,Gaz***

Enter the Road Group or individual Road Section Id to be reported on.

From Date	***(Optional)***

If required, enter the earliest ‘Date Raised ’ to be included on the report. Only those Works Orders raised after this date will be included in the report.

To Date	***(Optional)***

If required, enter the latest ‘Date Raised ’ to be included on the report. Only those Work Orders raised before this date will be included in the report.

Scheme Type	***(Required)***	***List***

Enter the Works Order Scheme type to be reported on.

Cyclical Maintenance Onl	***(Required, Default)***	***List***

Enter 'Y' to only include Cyclical Maintenance Work Orders only or 'N' to include both Cyclic and Defect Clearance Work Orders. The default value is 'N'.

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Local or DTp Flag	*(Required)*	*List*

Enter 'D' to select Work Orders on DoT roads or 'L' to select Work Orders on local roads.

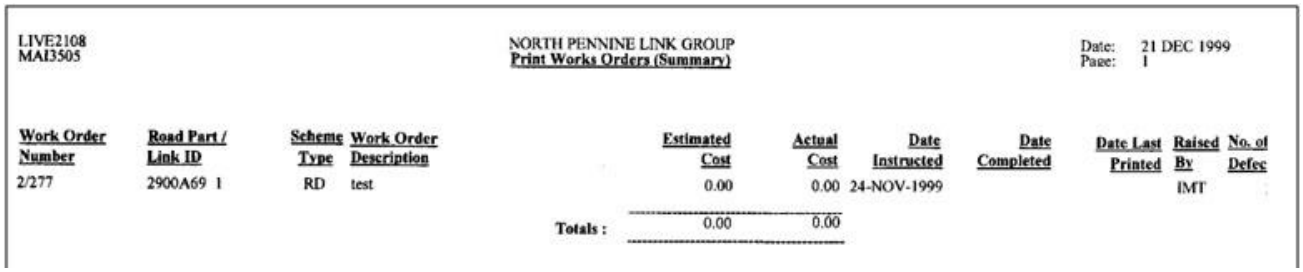
Complete or Outstanding	*(Optional)*	*List*

Enter 'C' to include only Completed Work Orders, 'O' to include only Outstanding Work Orders, or leave blank to include both.

Work Category	*(Optional)*	*List*

If required, enter the Work Category or partial Work Category with LIKE operator.

4.6.2 Work Orders (Summary) – MAI3505



LIVE2108
MAI3505

NORTH PENNINE LINK GROUP
Print Works Orders (Summary)

Date: 21 DEC 1999
Page: 1

Work Order Number	Road Part / Link ID	Scheme Type	Work Order Description	Estimated Cost	Actual Cost	Date Instructed	Date Completed	Date Last Printed	Raised By	No. of Defec
2/277	2900A69 1	RD	test	0.00	0.00	24-NOV-1999			IMT	
			Totals :	0.00	0.00					

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4.7 Work Order (NMA) – MAI3909

Purpose:

This report produces a detailed work order in a format acceptable to NMA's. The following information is displayed:

- Work Order Number
- Work Order Description
- Defect Id
- Cost Code
- Work Category
- Link Id
- Road Section Number
- Road Section Description
- Schedule of Rate Item Code
- Schedule of Rate Description
- Unit
- Rate
- Quantity
- Estimated Value of Works Order Line (including any percentage discount)

4.7.1 Selection Parameters

Confirmed Works Order No ***(Required)***

Enter the Works Order Number to be reported on.

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4.7.2 Work Orders (NMA) – MAI3909

DORSET
MAI3909

DORSET COUNTY COUNCIL
Print Works Order (NMA)

Date: 21-MAY-2009
Page: 1

Contractor : County Routine Maintenance Contractor
Agent : DORSET COUNTY COUNCIL
Contract : 8/902C

Work Order : 8/902C/2 Job Number : 00000 Work Category : Scheme Type: LR

Order Description : Test Stu 101

Commence By	:	Ext of Time	:	CI 14 Programme	: N
Complete By	:	Rev Compl By	:	Risk Assessment	: N
Def. Corr.Period	:	Completed On	: 07-MAY-2008	Method Statement	: N
Commence On	:	Interim Pay	: Y	Special CDM	: N
Quality Acc.	:				

Defect Id : 361499

Description :
Location :
Special :

Cost Code :
Work Category : 070131
Section : 1200A353 P/00934
Description : SWANNERY BRIDGE - KING'S R/A TO WESTHAM R/A, WEYMOUTH

SOR Item	Description	Unit	Rate	Quantity	Amount
29/01/001	TMA - Mobile lane close adj. verge block/working veh sign vehicle/trailer.	HOUR	179.08	0.10	17.91

Sub Total : 17.91

VOP 0.00 % V.O.P: 0.00

Overall Total : 17.91

Figure 189

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4.8 Work Order (Enhanced) – MAI3919

Purpose:

This option produces a 2-part report. This report produces an enhanced version of Print Work Order that includes extra fields and layout changes. The first provides contract details and includes the following information:

The following information is displayed:

- Contractor
- Work Order Number
- Work Order Description
- Date Issued
- Date Instructed
- Estimated Values of the Work Order
- Actual Values of the Work Order

The Second part provides details of each work order line and includes the following information:

- Repair Due Date
- Road Name
- Link and Section Number
- Defect Chainage
- Defect XSP
- Defect Id
- Defect Priority
- Defect Description
- Defect Location
- Repair Treatment
- BOQ Item Code
- BOQ Description
- Quantity
- Unit
- Rate
- Estimated Value of Works Order Line (including any percentage discount}

4.8.1 Selection Parameters

Draft Report? ***(Required)*** ***List***

Enter the either ‘Y’ or ‘N’ to indicate whether the report is to be draft.

Confirmed Works Order No ***(Required)***

Enter the Works Order Number to be reported on.

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4.8.2 Work Orders (Enhanced) – MAI3919

DORSET
MAI3919

DORSET COUNTY COUNCIL
Print Works Order (Enhanced)

Date: 21-MAY-2009
Page: 1

DORSET COUNTY COUNCIL

Contract Details :

Work Order No: 8/902C/2

To : County Routine Maintenance Contractor
Description : Test Stu 101

				Estimated Value	
Area :	WAP	Scheme Id :	00000	Sub Total :	17.91
Scheme Type	LR	Cost Centre :		Balancing Sum:	0.00
Issue Date :	07-MAY-2008	Instructed Date	07-MAY-2008	Total:	17.91

Engineer/Contact for the Works : _____

Work Restrictions :
Supporting Documents :

Received for Contractor By : _____ Date/Time : _____

Planned Start By :		Raised By :	SYS	Streetworks Notice :	N
Planned Completion :		Authorised By :	SYS	Utility Plans :	N
Planned Duration (days) :				Method Statement :	N
				Risk Assessment :	N
Actual Start :				CI 49 Maintenance :	
Actual Completion :				CI 14 Programme :	N
Actual Duration (days) :				Location Plan :	N
				Interim Payments :	Y

Actual Value	
Sub Total:	17.91
Balancing Sum:	0.00
Total:	17.91

Certified Costs : _____ For Client _____ For Contractor

Certified Complete : _____ For Client _____ For Contractor

Figure 190 - Part 1

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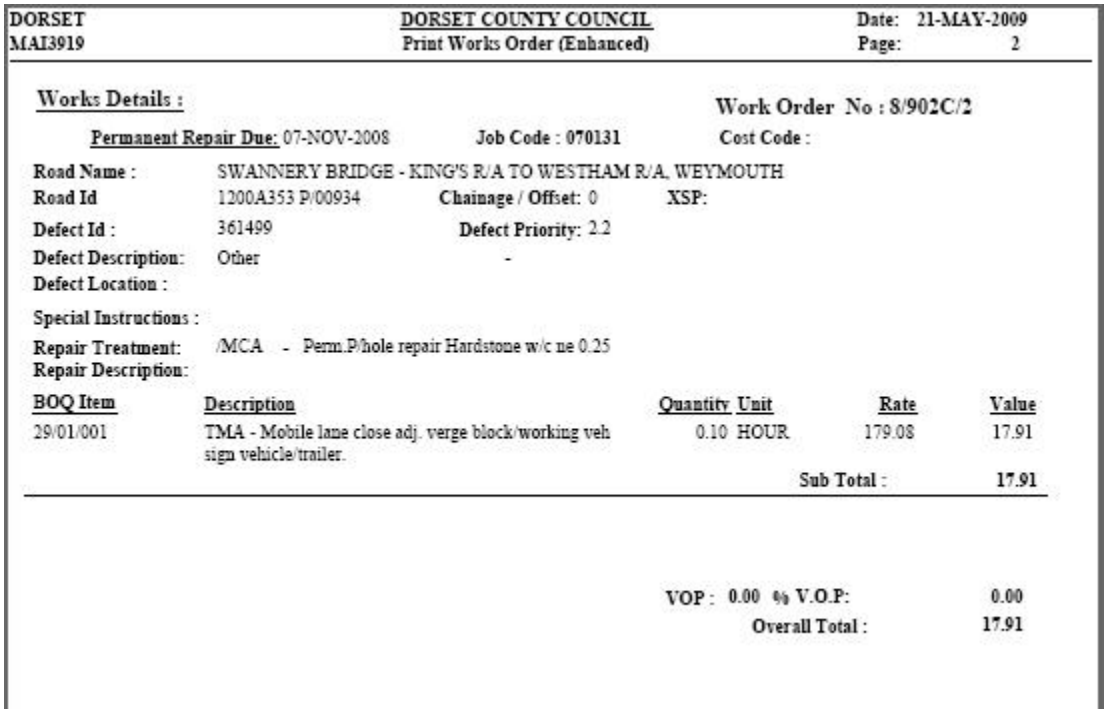

DORSET
MAI3919

DORSET COUNTY COUNCIL
Print Works Order (Enhanced)

Date: 21-MAY-2009
Page: 2

Works Details :

Work Order No : 8/902C/2

Permanent Repair Due: 07-NOV-2008 **Job Code : 070131** **Cost Code :**

Road Name : SWANNERY BRIDGE - KING'S R/A TO WESTHAM R/A, WEYMOUTH
Road Id 1200A353 P/00934 **Chainage / Offset:** 0 **XSP:**
Defect Id : 361499 **Defect Priority:** 2.2
Defect Description: Other -
Defect Location :
Special Instructions :
Repair Treatment: /MCA - Perm.P/hole repair Hardstone w/c ne 0.25
Repair Description:

BOQ Item	Description	Quantity	Unit	Rate	Value
29/01/001	TMA - Mobile lane close adj. verge block/working veh sign vehicle/trailer.	0.10	HOUR	179.08	17.91
				Sub Total :	**17.91**

VOP : 0.00 **% V.O.P:** 0.00
Overall Total : 17.91

Figure 191 - Part 2

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4.9 Work Order (Strip Plan) – MAI5130

Purpose:

This report produces a strip plan report showing a summary of the defects on the Selected Work Order in their Cross Sectional Positions. The following information is displayed:

- Link and Section Number
- Road Class
- Defect Chainage
- Defect XSP (displayed in strip plan format)
- Defect Description
- Attribute Value
- Defect Location
- Treatment Description

A Cross Sectional Position Key is also provided

4.9.1 Selection Parameters

Works Order No ***(Required)***

Enter the Works Order Number to be reported on.

4.9.2 Works Order (Strip Plan) – MAI5130

LIVE2108
MAI5130

NORTH PENNINE LINK GROUP
Print Works Orders (Strip Plan)

Date: 21 DEC 1999
Page: 2

Section 2900A69 1/10 Class AP

Chainage	1	2	3	4	5	6	7	8	9	0	Oth	Defect Description	Attribute	Location	Treatment Description
19			3									pothole 3*2*.50		B630 JUNCTION	RENEW 4 BEAMS STRAIGHTEN POSTS

End of Section 2900A69 1/10

Section 2900A69 1/24 Class AP

Chainage	1	2	3	4	5	6	7	8	9	0	Oth	Defect Description	Attribute	Location	Treatment Description
15			3											TOWNFOOT JUNCTION	RENEW 1 BOLLARD SHELL

End of Section 2900A69 1/24

Figure 192

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4.10 Review Raised Works Orders – MA3490

Purpose:

This report produces a summary list of all Work Orders which match the required selection parameters. The following information is displayed:

- Date Raised
- Road/Group Id
- Work Order No.
- Maintenance Work Order or Defect Clearance
- SISS Code
- Expenditure Code
- Date Closed

4.10.1 Selection Parameters

Works Order Status ***(Required, Default)*** ***List***

Enter 'A' to include all Work Orders, 'C' to include Completed Work Orders only, or 'R' to include Raised but not completed Work Orders.

Date From ***(Required, Default)***

Enter the earliest date from which to select Work Orders. Only Work Orders Raised after this date will be included in the report. The default value is the 'system date -365 days'.

Date To ***(Required, Default)***

Enter the latest date from which to select Work Orders. Only Work Orders Raised before this date will be included in the report. The default value is the 'system date'.

Local or DoT Flag ***(Required, Default)***

Enter 'D' to include Work Orders on DoT roads or 'L' for Work Orders on Local roads. The default value is 'D'.

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4.10.2 Review Raised Works Orders – MAI3490

LIVE2108 LIVE2108 NORTH PENNINE LINK GROUP Date: 21 DEC 1999
MAI3490 Review Raised Works Orders Page: 1

Date Raised	Road	Work Order No	M/D	SISS Code	Expenditure Code	Date Closed
05-MAR-1999	4510A69 1	3/25	D			11-MAR-1999
11-MAR-1999	2900A69 1	2/274	D			
16-JUL-1999	0900A69 1	3/26	D			
16-JUL-1999	0900A69 1	2/275	D			
22-OCT-1999	2900A69 1	2/276	D			
17-NOV-1999	CLOSEGILL	3/27	D			
22-NOV-1999	0900A69 1	4/66	D			
23-NOV-1999	2900A69	3/28	M			
23-NOV-1999	DEPOT WORK	4/67	D			
24-NOV-1999	2900A69 1	2/277	D			

Figure 193

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4.11 Defects not yet Instructed – MAI3922

Purpose:

This report produces a List of defects which have a Status of 'AVAILABLE' and which meet the required selection parameters. Defects, which appear on this report, may be selected on a Work Order. The following information is displayed:

- Defect Id
- Defect Type
- Link and Section Id
- Road Section Description
- Defect Location
- Rechargeable Organistaion
- Defect XSP
- Defect Chainage
- Date Inspected
- Due Date
- Days to due date
- Special Instructions
- Repair Type
- Defect Priority
- BOQ Item
- BOQ Quantities
- Total Cost/Labour Units

4.11.1.1 Selection Parameters

Admin Unit ***(Required, Default)*** ***List***

Select an administrational unit to be used for this report. The default is the Admin Unit assigned to the current User.

Road Type ***(Optional)*** ***List***

If required, enter the Road Type from which to select defects from. If this field is left blank all Road Group Types will be reported on.

Road Id ***(Optional)*** ***List***

If required, enter the Road Group Id from which to select defects from. If this field is left blank all Road Group Types will be reported on.

From Date ***(Optional)***

If required, enter the earliest ‘Date Inspected ’ to be included on the report. Only those Defect Records recorded after this date will be included in the report.

To Date ***(Optional)***

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If required, enter the latest 'Date Inspected ' to be included on the report. Only those Defect Records before this date will be included in the report.

Defect Type ***(Optional)*** ***List***

If required, enter the Defect Type to be included on the report. If this field is left blank all defect types will be included.

Defect Priority ***(Optional)*** ***List***

If required, enter the defect priority to be reported on. If this field is left blank all defect priorities will be included. To report on multiple Defect Priorities, press the [Create Record] button on the toolbar.

SISS ***(Optional)*** ***List***

If required, enter the Standard Item Sub Section (SISS) to be reported on. If this field is left blank all SISS Codes will be included. To include multiple SISS codes, press the [Create Record] button on the toolbar.

Item Code ***(Optional)*** ***List***

If required, enter the Item code to be reported on. If this field is left blank all Item Codes will be included. To include multiple Item Codes, press the [Create Record] button on the toolbar.

XSP ***(Optional)*** ***List***

If required, enter the Cross Sectional Position of defects to be reported on. If this field is left blank defect on all XSP's will be included.

4.11.2 Defects Not Yet Instructed – MAI3922

EXOR2204 EXOR2204 **List of Defects Not Yet Instructed** Date: 05-SEP-2000
MAI3922 Page: 1

Road Group: DEMOA1625 SISS: ALL All Standard Items

Priority: 2.3

Defect Id / St. Chain	Type / Date Inspected	Road Section / Due Date	Days to Due Date	Defect Location / Special Instructions			Recharge	XSP
28	OTHR	DEMOA16251/03	TEST SECTION 2	aaaa				1
0	25-MAY-2000	25-NOV-2000	80	aaaaa				
PERMANENT	ITEM1	Item 1		10.00	GRIP	10.00		
	SHP1	Daisey		10.00	ITEM	100.00		

Total Cost/Lab Units: 110.00

Figure 194

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4.12 Summary of Defects Not Yet Instructed – MAI3920

Purpose:

This report produces a List of defects which have a Status of 'AVAILABLE' and which meet the required selection parameters. Defects, which appear on this report, may be selected on a Work Order. The report is ordered by Road Id and is divided by Priority and Standard Item Sub Section. The following information is displayed:

- Road Group Name/Link and Section Id
- Defect Priority
- SISS
- Labour Units
- Cost

4.12.1 Selection Parameters

Admin Unit ***(Required, Default)*** ***List***

Select an administrational unit to be used for this report. The default is the Admin Unit assigned to the current User.

Road Type ***(Optional)*** ***List***

If required, enter the Road Type from which to select defects from. If this field is left blank all Road Group Types will be reported on.

Road Id ***(Optional)*** ***List***

If required, enter the Road Group Id from which to select defects from. If this field is left blank all Road Group Types will be reported on.

From Date ***(Optional)***

If required, enter the earliest 'Date Inspected ' to be included on the report. Only those Defect Records recorded after this date will be included in the report.

To Date ***(Optional)***

If required, enter the latest 'Date Inspected ' to be included on the report. Only those Defect Records before this date will be included in the report.

Defect Type ***(Optional)*** ***List***

If required, enter the Defect Type to be included on the report. If this field is left blank all defect types will be included.

Defect Priority ***(Optional)*** ***List***

If required, enter the defect priority to be reported on. If this field is left blank all defect priorities will be included. To report on multiple Defect Priorities, press the [Create Record] button on the toolbar.

SISS ***(Optional)*** ***List***

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If required, enter the Standard Item Sub Section (SISS) to be reported on. If this field is left blank all SISS Codes will be included. To include multiple SISS codes, press the [Create Record] button on the toolbar.

Item Code (Optional) List

If required, enter the Item code to be reported on. If this field is left blank all Item Codes will be included. To include multiple Item Codes, press the [Create Record] button on the toolbar.

XSP (Optional) List

If required, enter the Cross Sectional Position of defects to be reported on. If this field is left blank defect on all XSP's will be included.

Summary of Defects Not Yet Instructed

EXOR2204 EXOR2204 Summary of Defects Not Yet Instructed Date: 05-SEP-00
MAI3920 Page: 1

Road Group DEMOA16251

Priority 2.3

SISS	Lab Units	Cost	Lab Units	Cost
ALL	0.00	110.00	0.00	110.00
Total	0.00	110.00	0.00	110.00

Figure 195

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4.13 Instructed Work by Status – MAI3924

Purpose:
This report produces a list of all Defects currently on a Work Order which meet the required selection parameters.

4.13.1 Selection Parameters

Admin Unit ***(Required, Default)*** ***List***

Select an administrational unit to be used for this report. The default is the Admin Unit assigned to the current User.

Road Type ***(Optional)*** ***List***

If required, enter the Road Type from which to select defects from. If this field is left blank all Road Group Types will be reported on.

Road Id ***(Optional)*** ***List***

If required, enter the Road Group Id from which to select defects from. If this field is left blank all Road Group Types will be reported on.

Date Instructed From ***(Optional)***

If required, enter the earliest 'Date Instructed ' to be included on the report. Only those Defects on Work Orders Instructed after this date will be included in the report.

Date Instructed To ***(Optional)***

If required, enter the latest 'Date Instructed ' to be included on the report. Only those Defects on Work Orders Instructed before this date will be included in the report.

Work Status ***(Required)*** ***List***

Enter the Work Status to be reported on.

Defect Priority ***(Optional)*** ***List***

If required, enter the defect priority to be reported on. If this field is left blank all defect priorities will be included. To report on multiple Defect Priorities, press the [Create Record] button on the toolbar.

Contract Name ***(Optional)*** ***List***

If required, enter the name of the contract to be reported on.

Repair Type (P/T) ***(Optional)*** ***List***

Enter 'P' to include Defects with Permanent Repair types only, 'T' to include Defects with Temporary Repair types only or leave blank to include both.

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4.13.2 Instructed Work by Status – MAI3924

MICK MICK List of Instructed Work by Status Date: 08-JUN-2004
MAI3924 Page: 2

Admin Unit Demo County Council

Road Group LOCAL **SISS** ALL All Standard Items

Priority 2.3

Defect Id	Type	Road Section		Due Date	Days to Due Date	Date Instructed	Date Inspected
280	POTH	0000000905/00010	FREEMANTLE ROAD - MICKLEOVER	18-JAN-2004	-142	05-JAN-2004	04-JAN-2004
Defect Location				**Recharge**	**XSP**	**St Chain**	
Outside No 1					4	12	

Action	Item		Quantity	Rate	Cost
PERMANENT	H1001	TSM S'CWay 1 day L'out 7	1.00	155.95	155.95
	H2346	ex/re () CGWC W/C35 =5m2	1.00	7.85	7.85

Total Cost / Lab Units 163.80 0.00

Figure 196

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4.14 Instructed Defects Due for Completion – MAI3926

Purpose:

This report produces a list of all defects which are currently on Work Orders but have not yet been completed i.e. have a status of 'Instructed', and which meet the required selection parameters. The following information is displayed:

- Road Group
- Priority
- Defect Id
- Road Section Id
- Road Section Description
- XSP
- Start Chainage of Defect
- Date Instructed
- Labour Units
- Work Status
- Total Cost

4.14.1 Selection Parameters

Admin Unit ***(Required, Default)*** ***List***

Select an administrational unit to be used for this report. The default is the Admin Unit assigned to the current User.

Road Type ***(Optional)*** ***List***

If required, enter the Road Type from which to select defects from. If this field is left blank all Road Group Types will be reported on.

Road Id ***(Optional)*** ***List***

If required, enter the Road Group Id from which to select defects from. If this field is left blank all Road Group Types will be reported on.

Date Instructed From ***(Optional)***

If required, enter the earliest ‘Date Instructed ’ to be included on the report. Only those Defects on Work Orders Instructed after this date will be included in the report.

Date Instructed To ***(Optional)***

If required, enter the latest ‘Date Instructed ’ to be included on the report. Only those Defects on Work Orders Instructed before this date will be included in the report.

Defect Priority ***(Optional)*** ***List***

If required, enter the defect priority to be reported on. If this field is left blank all defect priorities will be included. To report on multiple Defect Priorities, press the [Create Record] button on the toolbar.

Contract Id ***(Optional)*** ***List***

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If required, enter the name of the contract to be reported on.

Works Order No	*(Required)*	*List*

If required, enter the Works Order Number to be reported on.

SISS	*(Optional)*	*List*

If required, enter the Standard Item Sub Section (SISS) to be reported on. If this field is left blank all SISS Codes will be included. To include multiple SISS codes, press the [Create Record] button on the toolbar.

XSP	*(Optional)*	*List*

If required, enter the Cross Sectional Position of defects to be reported on. If this field is left blank defect on all XSP's will be included.

4.14.2 Instructed Defects due for Completion

EXOR2204 EXOR2204 List of Instructed Defects due for Completion Date: 05-SEP-2000
MAI3926 Page: 3

Road Group: DEMOA271__ SISS: ALL All Standard Items

Priority: 1

Defect Id:	34	Road Section:	DEMOA271__05	TEST SECTION FOR INSPECTION LO	XSP:	1	St Chain:	12
Locn:	bar			Date Instructed: 22-AUG-2000	Due Date:	22-AUG-2000	Days to Due:	- 14.00
Work Order No:	DEMO/33	Work Sheet No:		Total Cost: 228.20	Labour Units:		Work Status:	INSTRUCTED
Defect Id:	35	Road Section:	DEMOA271__05	TEST SECTION FOR INSPECTION LO	XSP:	1	St Chain:	12
Locn:	bar			Date Instructed: 22-AUG-2000	Due Date:	22-AUG-2000	Days to Due:	- 14.00
Work Order No:	DEMO/33	Work Sheet No:		Total Cost: 114.10	Labour Units:		Work Status:	INSTRUCTED
Defect Id:	36	Road Section:	DEMOA271__05	TEST SECTION FOR INSPECTION LO	XSP:	1	St Chain:	12
Locn:	bar			Date Instructed: 22-AUG-2000	Due Date:	22-AUG-2000	Days to Due:	- 14.00
Work Order No:	DEMO/33	Work Sheet No:		Total Cost: 91.28	Labour Units:		Work Status:	INSTRUCTED
Defect Id:	39	Road Section:	DEMOA271__05	TEST SECTION FOR INSPECTION LO	XSP:	W	St Chain:	56
Locn:	bar			Date Instructed: 22-AUG-2000	Due Date:	22-AUG-2000	Days to Due:	- 14.00
Work Order No:	DEMO/33	Work Sheet No:		Total Cost: 136.92	Labour Units:		Work Status:	INSTRUCTED
Defect Id:	41	Road Section:	DEMOA271__05	TEST SECTION FOR INSPECTION LO	XSP:	1	St Chain:	23
Locn:	bar			Date Instructed: 22-AUG-2000	Due Date:	22-AUG-2000	Days to Due:	- 14.00
Work Order No:	DEMO/33	Work Sheet No:		Total Cost: 342.30	Labour Units:		Work Status:	INSTRUCTED
Defect Id:	42	Road Section:	DEMOA271__05	TEST SECTION FOR INSPECTION LO	XSP:	1	St Chain:	23
Locn:	bar			Date Instructed: 22-AUG-2000	Due Date:	22-AUG-2000	Days to Due:	- 14.00
Work Order No:	DEMO/33	Work Sheet No:		Total Cost: 342.30	Labour Units:		Work Status:	INSTRUCTED
Defect Id:	43	Road Section:	DEMOA271__05	TEST SECTION FOR INSPECTION LO	XSP:	3	St Chain:	12
Locn:	bar			Date Instructed: 22-AUG-2000	Due Date:	23-AUG-2000	Days to Due:	- 13.00
Work Order No:	DEMO/33	Work Sheet No:		Total Cost: 2282.00	Labour Units:		Work Status:	INSTRUCTED

Figure 197

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4.15 Inventory Updates – MAI3930

Purpose:

This report produces a summary of defects which require Inventory information to be updated, i.e. have the 'Update Inv ?' field on Defects – MAI3806 set to 'Y', and which meet the required selection parameters.

4.15.1 Selection Parameters

Admin Unit	*(Required, Default)*	*List*

Select an administrational unit to be used for this report. The default is the Admin Unit assigned to the current User.

Road Type	*(Optional)*	*List*

If required, enter the Road Type from which to select defects from. If this field is left blank all Road Group Types will be reported on.

Road Id	*(Optional)*	*List*

If required, enter the Road Group Id from which to select defects from. If this field is left blank all Road Group Types will be reported on.

Date Inspected From	*(Optional)*

If required, enter the earliest ‘Date Inspected ’ to be included on the report. Only those Defect Records recorded after this date will be included in the report.

Date Inspected To	*(Optional)*

If required, enter the latest ‘Date Inspected ’ to be included on the report. Only those Defect Records before this date will be included in the report.

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4.16 Work for Quality Inspection – MAI3950

Purpose:

This report produces a random batch of completed Work Order Lines for a Work Quality Audit which meet the required selection parameters. When the Work Audit is carried out ,the results are updated using 'Quality Inspection Results – MAI3820'. Once a Work Order line is selected in a batch it cannot be re-selected in subsequent Quality Inspection batches. The following information is displayed :

- Batch Number
- Road Id and Description
- Road Group
- Defect/Schedule Id
- Defect Location
- Works Order No
- Work Sheet No
- Date Completed
- BOQ Items and dimensions
- Check Result (Place holder)
- Check Code (Place holder)
- Comments (Place holder)
- Checked by (Place holder)
- Date Checked (Place holder)

4.16.1 Selection Parameters

Admin Unit ***(Required, Default)*** ***List***

Select an administrational unit to be used for this report. The default is the Admin Unit assigned to the current User.

Road Type ***(Optional)*** ***List***

If required, enter the Road Type from which to select defects from. If this field is left blank all Road Group Types will be reported on.

Road Id ***(Optional)*** ***List***

If required, enter the Road Group Id from which to select defects from. If this field is left blank all Road Group Types will be reported on.

Contract Id ***(Optional)*** ***List***

If required, enter the name of the contract to be reported on.

Date Completed From ***(Optional)***

If required, enter the earliest ‘Date Completed’ to be included on the report. Only those Work Order Lines completed after this date will be included in the report.

Date Completed To ***(Optional)***

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If required, enter the latest 'Date Completed' to be included on the report. Only those Work Order Lines completed before this date will be included in the report.

Sample Percentage ***(Required, Default)***

Enter the Percentage of Work Order lines, which meet the required selection parameters, to select for the Quality Audit. The default value is 5%.

SISS ***(Optional)*** ***List***

If required, enter the Standard Item Sub Section (SISS) to be reported on. If this field is left blank all SISS Codes will be included.

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4.16.2 Work for Quality Inspection – MAI3950

LIVE2108 LIVE2108 NORTH PENNINE LINK GROUP Date: 29-DEC-99
MAI3950 List of Work for Quality Inspection Page: 12

Contractor Northumberland Contracting
Contract 001 NPLG OPERATION & MAINTENANCE (NCC)

Batch No 21

Road Id	Road Description	Road Group
2900A69 1/32	B6319 JCT TO C229 HAYDON BRIDGE	2900A69 1

Defect/Schedule Id 191 Location: OLD TYNE BRIDGE HAYDON BRI
Works Order No 2/00033 Work Sheet No Date Completed 02-JUL-96
Item: 1 UNDERTAKE REPAIR

0.00 * 0.00 * 0.00 = 0.00 ITEM

Check Ind : Check Code : Comments:
Checked by :_____ Date Checked :_____

Contractor Northumberland Contracting
Contract 001 NPLG OPERATION & MAINTENANCE (NCC)

Batch No 21

Road Id	Road Description	Road Group
2900A69 1/42	C284 ELRINGTON TO BUSH FARM	2900A69 1

Defect/Schedule Id 916 Location: WEST OF BUSH FARM
Works Order No 2/00069 Work Sheet No Date Completed 11-SEP-96
Item: 1 UNDERTAKE REPAIR

0.00 * 0.00 * 0.00 = 0.00 ITEM

Check Ind : Check Code : Comments:
Checked by :_____ Date Checked :_____

Figure 198

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4.17 Quality Inspection Performance – MAI3952

Purpose:

This report produces a summary of Quality Inspections carried out and updated in 'Quality Inspection Results – MAI3820'. The following information is displayed:

- Supervisor Code
- Number of Inspections carried out
- Number of repairs checked
- Number of repairs passed
- % Passed
- Number Borderline
- % Borderline
- Number Failed
- % Failed
- Total Repairs Completed
- % Checked

4.17.1 Selection Parameters

Admin Unit	***(Required, Default)***	***List***

Select an administrational unit to be used for this report. The default is the Admin Unit assigned to the current User.

Road Type	***(Optional)***	***List***

If required, enter the Road Type from which to select defects from. If this field is left blank all Road Group Types will be reported on.

Road Id	***(Optional)***	***List***

If required, enter the Road Group Id from which to select defects from. If this field is left blank all Road Group Types will be reported on.

Quality Inspected From	***(Optional)***

If required, enter the earliest date of Quality Inspection to be included on the report. Only those Work Order Lines quality inspected after this date will be included in the report.

Quality Inspected To	***(Optional)***

If required, enter the latest date of Quality Inspection to be included on the report. Only those Work Order Lines quality inspected before this date will be included in the report.

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LIVE2108 MAI3952 LIVE2108 LIVE2108 Quality Inspection Performance Report Date: 29-DEC-99 Page: 1

Supervisor Codes	Number of Inspections	No of Repairs Checked	Number Passed	% Passed	Number Borderline	% Borderline	Number Failed	% Failed
ADM	2	2	1	50.00	0	0.00	1	50.00
Totals	2	2	1	50.00	0	0.00	1	50.00

Total Repairs Completed 2
% Checked 100.00

Figure 199 - Quality Inspection Performance – MAI3952

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4.18 Admin Unit Performance – MAI3956

Purpose:

This report provides a 2 part report. The first is a summary of the performance of an Administrative Unit in terms of the quantity of work done within the required timescale. The report provides a summary count for each defect priority and totals work in the following categories.

- Number of defects completed Within Target Time
- Number of defects completed 0-7 days late
- Number of defects completed 8-14 days late
- Number of defects completed 15-28 days late
- Number of defects completed more than 28 days late (this total may include defects not yet completed)

The report also provides the following information:

- Total Work Written Off
- % Within Time

If a defect has not been repaired within the required Target Time a summary of the Defect the Work Order it has been instructed on is provided on Part 2 of the Report.

4.18.1 Selection Parameters

Admin Unit ***(Required, Default)*** ***List***

Select an administrational unit to be used for this report. The default is the Admin Unit assigned to the current User.

Date Inspected From ***(Optional)***

Enter the earliest date of Inspection to be included on the report. Only those Defects raised after this date will be included in the report.

Date Inspected To ***(Optional)***

Enter the latest date of Inspection to be included on the report. Only those Defects raised before this date will be included in the report.

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4.18.2 Admin Unit Performance – MAI3956

LIVE2108 LIVE2108 — NORTH PENNINE LINK GROUP — Date: 29 DEC 1999
MAI3956 — Admin Unit Performance Report — Page: 1

Part 1
Period
To

Road Group	Priority	Within Target	0-7 Days Late	8-14 Days Late	15-28 Days Late	Greater than 28 days	Total	Work Written Off	% Within Time
0900A69 1	1	200	4	4	5	53	266	0	75.19
	2.1	0	0	0	0	5	5	0	0
	2.2	1	0	0	0	27	28	0	3.57
	2.3	2	0	0	0	39	42	1	4.76
		203	4	4	5	124	341	1	59.53
2900A69 1	1	263	107	1	5	167	619	76	42.49
	2.1	0	0	0	0	2	2	0	0
	2.2	0	0	0	0	1	1	0	0
	2.3	12	9	35	4	1019	1113	34	1.08
		275	116	36	9	1189	1735	110	15.85
2900A69 2	1	101	34	0	6	209	518	168	19.5
	2.2	0	0	0	0	2	2	0	0
	2.3	9	0	0	0	1078	1091	4	.82
		110	34	0	6	1289	1611	172	6.83
4510A69 1	1	42	24	15	3	6	91	1	46.15
	2.1	2	0	0	0	0	2	0	100
	2.3	0	0	0	0	21	21	0	0
		44	24	15	3	27	114	1	38.6
Total	1	606	169	20	19	435	1494	245	40.56
For All	2.1	2	0	0	0	7	9	0	22.22
Sectors	2.2	1	0	0	0	30	31	0	3.23
	2.3	23	9	35	4	2157	2267	39	1.01
		0	0	0	0	0	0	0	0
		632	178	55	23	2629	3801	284	16.63

Figure 200 - Part 1

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LIVE2108 LIVE2108 NORTH PENNINE LINK GROUP Date: 29 DEC 1999
MA13956 Admin Unit Performance Report Page: 2

Part 2

Contractor City Works

Defect Id	Works Order No	Works Order Sheet No	Priority Code	Defect Code	Date Inspected	Date Instructed	Due Date	Date Completed	Works Order Re-issue Date
91 Road Group	3/00001		1 Road Id	MISS 4510A69	18-APR-1996 1/68	18-APR-1996 A69 THROCKLEY BYPASS MAIN CWY WESTBOUND	19-APR-1996	28-APR-1996	
92 Road Group	3/00001		1 Road Id	MISS 4510A69	18-APR-1996 1/68	18-APR-1996 A69 THROCKLEY BYPASS MAIN CWY WESTBOUND	19-APR-1996	28-APR-1996	
93 Road Group	3/00001		1 Road Id	MISS 4510A69	18-APR-1996 1/68	18-APR-1996 A69 THROCKLEY BYPASS MAIN CWY WESTBOUND	19-APR-1996	28-APR-1996	
94 Road Group	3/00001		1 Road Id	MISS 4510A69	18-APR-1996 1/68	18-APR-1996 A69 THROCKLEY BYPASS MAIN CWY WESTBOUND	19-APR-1996	28-APR-1996	
95 Road Group	3/00001		1 Road Id	MISS 4510A69	18-APR-1996 1/68	18-APR-1996 A69 THROCKLEY BYPASS MAIN CWY WESTBOUND	19-APR-1996	28-APR-1996	
96 Road Group	3/00001		1 Road Id	MISS 4510A69	18-APR-1996 1/55	18-APR-1996 A69 THROCKLEY BYPASS MAIN CWY WESTBOUND	19-APR-1996	28-APR-1996	
97 Road Group	3/00001		1 Road Id	MISS 4510A69	18-APR-1996 1/55	18-APR-1996 A69 THROCKLEY BYPASS MAIN CWY WESTBOUND	19-APR-1996	28-APR-1996	
98 Road Group	3/00001		1 Road Id	MISS 4510A69	18-APR-1996 1/54	18-APR-1996 A69 THROCKLEY BYPASS MAIN CWY EASTBOUND	19-APR-1996	28-APR-1996	
99 Road Group	3/00001		1 Road Id	MISS 4510A69	18-APR-1996 1/54	18-APR-1996 A69 THROCKLEY BYPASS MAIN CWY EASTBOUND	19-APR-1996	28-APR-1996	
100 Road Group	3/00001		1 Road Id	MISS 4510A69	18-APR-1996 1/67	18-APR-1996 A69 THROCKLEY BYPASS MAIN CWY EASTBOUND	19-APR-1996	28-APR-1996	
101 Road Group	3/00001		1 Road Id	MISS 4510A69	18-APR-1996 1/67	18-APR-1996 A69 THROCKLEY BYPASS MAIN CWY EASTBOUND	19-APR-1996	28-APR-1996	
102 Road Group	3/00001		1 Road Id	MISS 4510A69	18-APR-1996 1/78	18-APR-1996 A69 THROCKLEY BYPASS MAIN CWY EASTBOUND	19-APR-1996	28-APR-1996	

Figure 201 - Part 2

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5 Cyclic Maintenance Works Orders Admin

This chapter describes the forms used to manage Cyclic Maintenance Works Orders.

This chapter contains the following forms:

- Cyclic Maintenance Inventory Rules – MAI3626
- Cyclic Maintenance Schedules – MAI3860
- Cyclic Maintenance Schedules by Section – MAI3862
- View Cyclic Maintenance Work – MAI3804
- Maintain Maintenance Reports – MAI3250
- Valid for Maintenance Rules – MAI3440
- Related Maintenance Activities – MAI3628

The form descriptions provide you with detailed information about each Cyclic Maintenance Works Ordering form in highways by exor, including:

- an overall description of the form
- a detailed explanation of each field, including available features (such as List of Values), default values and other characteristics
- helpful information for using the form

5.1 General Information

The Cyclic Maintenance system allows the generation of cyclic works orders to perform regular maintenance tasks. These works orders are automatically generated on request and are complete down to the level of the individual job items and quantities required.

To be used effectively, the cyclic maintenance system requires that the road network be defined and all the relevant inventory be loaded against it. These activities are covered in the Network Manager and Asset Manager manuals respectively.

If however, the inventory on the system is inaccurate or the type required for the cyclic activity does not exist on the required sections, cyclic maintenance can be carried out on these sections although it is a slightly more manual task.

The cyclic maintenance system uses the network and inventory data to ascertain how much work there is to be done of a certain type. For example, the cyclic operation of Grass Cutting requires the knowledge of what length of grass verge exists along the relevant roads. Once this quantity has been calculated, the system can raise a cyclic works order to action a specific length of Grass cutting. As this item will exist on a contract, this work can be costed and budgeted for.

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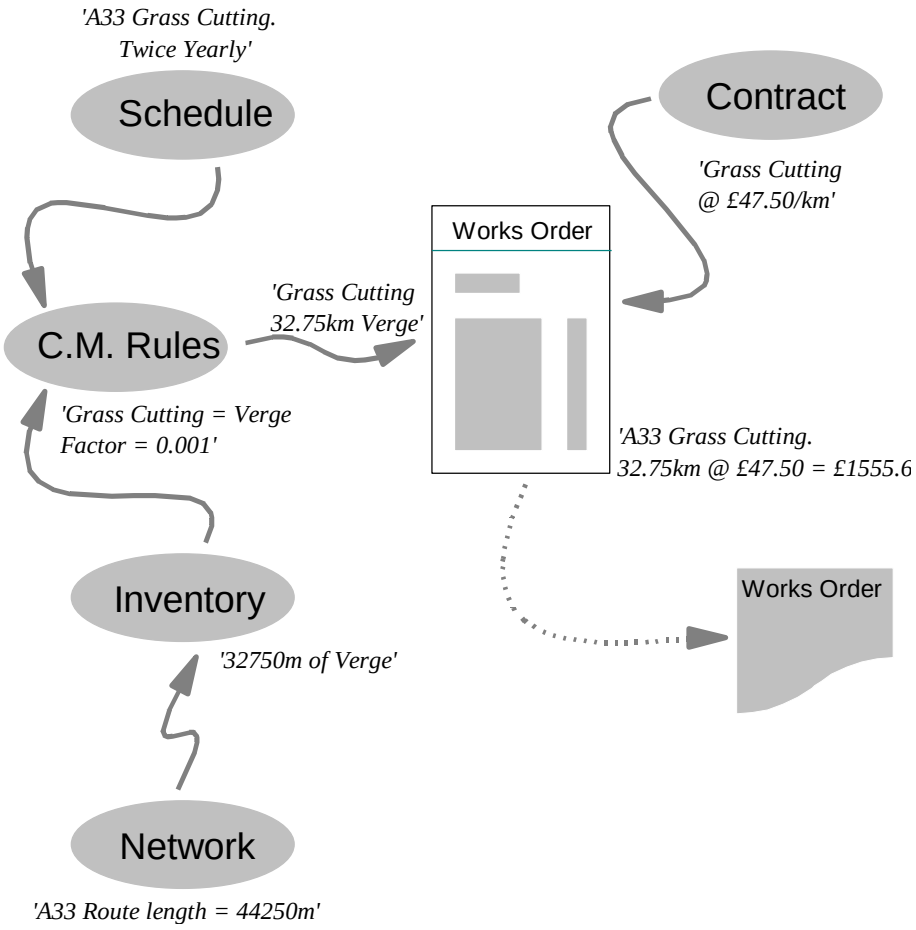

Figure 202

When a new schedule is created using Cyclic Maintenance Schedules – MAI3860, the system will scan the network, calculating how much inventory will be affected by the work to be done under the schedule. This amount is available to view within the schedule.

You must then use Cyclic Maintenance Schedules By Section – MAI3862 to determine, for each road section within the scheduled road group, exactly how much work you want to be carried out each time the schedule is run. It is possible to simply accept the calculated quantity, or you may choose to override this quantity and enter your own value. This process may be done at group level, depending on how the values are set up in Product Options – HIG9130, setting the USECYCGRPD (DoT roads) or USECYCGRPL (Local roads) options.

Once the schedules have been created and the quantities of work to be done calculated, cyclic works orders can then be created at any time using Works Orders (Cyclic)- MAI3800. This form will, when given a schedule name, generate and cost an appropriate works order to cover all the work needed to fulfill the schedule. This works order can then be viewed, amended and printed for issue to the contractor.

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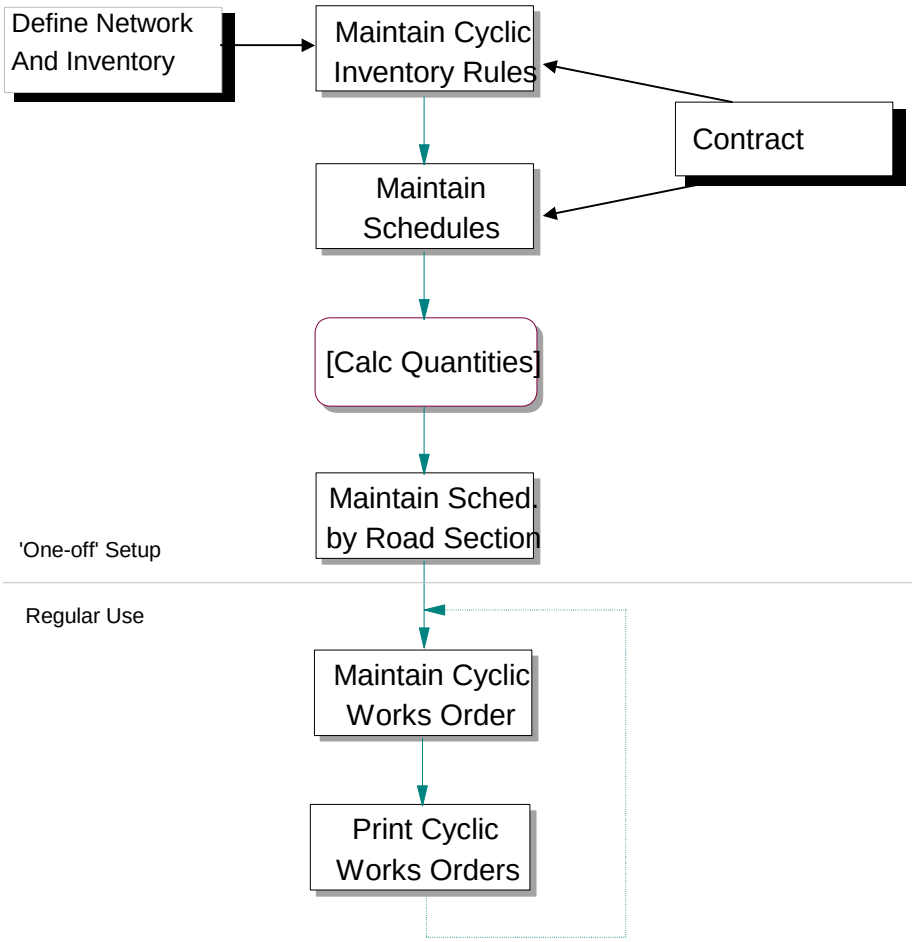

Figure 203

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5.2 CyclicMaintenance Inventory Rules – MAI3626

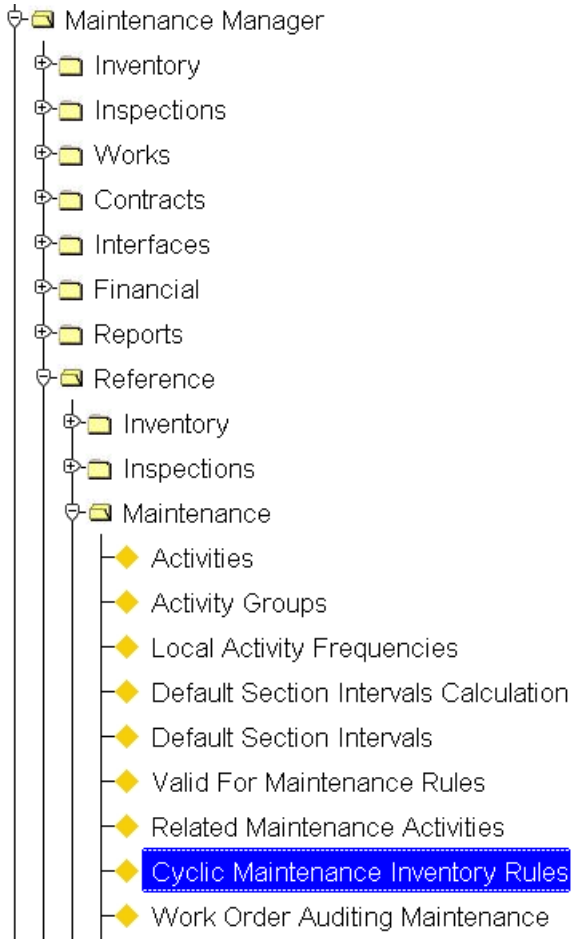

Figure 204 - Cyclic Maintenance Inventory Rules Menu Option

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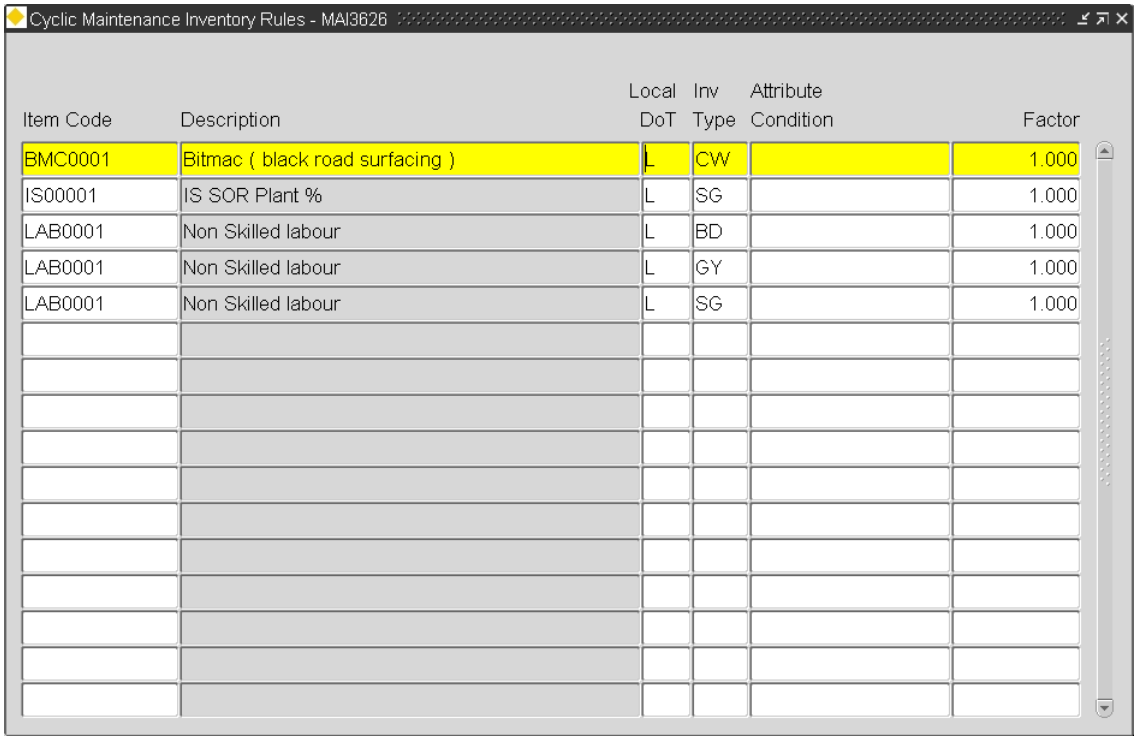

Item Code	Description	Local DoT	Inv Type	Attribute Condition	Factor
BMC0001	Bitmac (black road surfacing)	L	CW		1.000
IS00001	IS SOR Plant %	L	SG		1.000
LAB0001	Non Skilled labour	L	BD		1.000
LAB0001	Non Skilled labour	L	GY		1.000
LAB0001	Non Skilled labour	L	SG		1.000

Figure 205 - Cyclic Maintenance Inventory Rules

5.2.1 General Information

When a cyclic maintenance works order schedule is set up it looks at the data within this form to work out the quantity of work to be done based on the inventory contained on the selected sections

Before cyclic maintenance works orders can be generated from the system, a set of rules for each type of inventory to be included must be created. These rules determine which inventory types will be affected when each of the standard jobs are carried out.

If no inventory exists on the sections and the actual values are to be entered using Cyclic Maintenance Schedules by Section – MAI3862 no rules need entering.

5.2.2 Cyclic Maintenance Inventory Rules

When you enter this window the cursor sits in the Loca/DTp field waiting for you to enter new data. To obtain existing data press [Execute Query] from the toolbar.

Item Code ***(Required)*** ***List***

Select a valid job item from the List of Values to represent the work.

Description ***(Display Only)***

A description of the item code will be displayed.

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Local/DoT ***(Required)*** ***List***

Enter 'L' for Local, 'D' for DoT inventory.

Inv Type ***(Required)*** ***List***

Select a valid inventory item type to represent the inventory which the current job item acts upon.

Attribute Condition ***(Optional)***

If required, enter a logical condition to restrict the inventory affected by the current job item. This field is used to be more selective with the inventory item and can limit the work to inventory of a given type. It is populated with the inventory item 'Column Name' and 'Attribute Values' which can be established from Asset Metamodel – NM0410. For example, for grass cutting on an embankment where the angle of the embankment required is less than 45° the Attribute condition would be: IIT_ANGLE < 45

Factor ***(Optional)***

Enter a factor if the contract rate is charged on a different unit of measurement to the unit the inventory item is normally measured in.

For example, a verge is measured in metres but the SOR price may be priced per kilometre, in this case a factor of 0.001 can be applied converting the verge length from metres to kilometres.

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5.3 Cyclic Maintenance Schedules – MAI3860

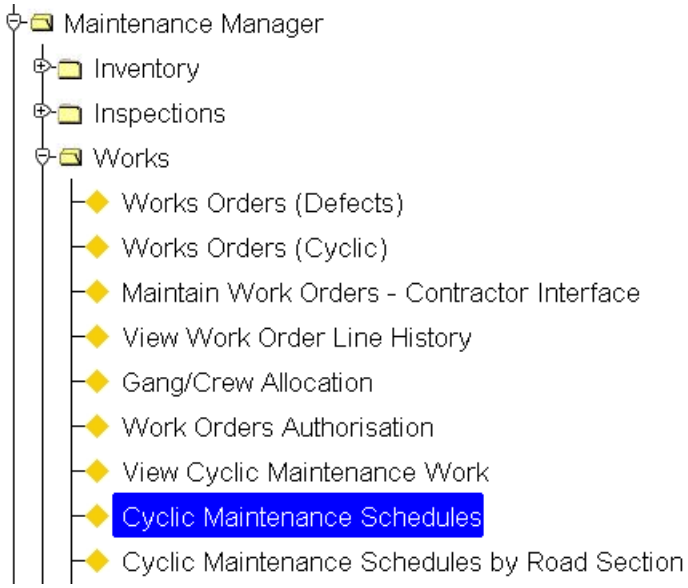

Figure 206 - Cyclic Maintenance Schedules Menu Option

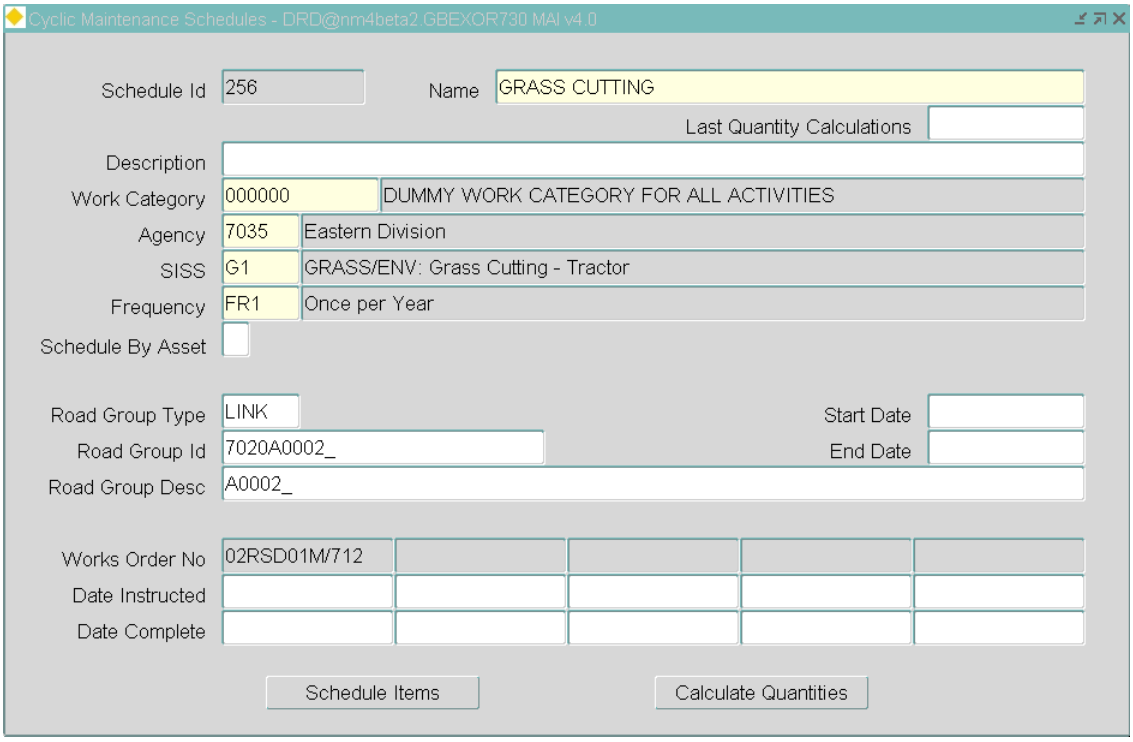

Figure 207 - Cyclic Maintenance Schedule

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5.3.1 General Information

It allows the definition of cyclic maintenance schedules for use when generating cyclic works orders.

A cyclic maintenance schedule is simply a list of standard job items and quantities, which are to be carried out along a predetermined stretch of road at a predefined frequency. An example would be Grass Cutting all the grass verges and embankments along the A33 twice yearly.

The schedule itself is linked to a road group or road section, thus allowing the amounts of inventory items along each section to be calculated. In this way, this form can automatically calculate work volumes for each standard job item.

The method of calculation is set up in Product Options – HIG9130, setting the USECYCGRPD (DoT roads) or USECYCGRPL (Local roads) options to either 'Y' or 'N'. These product options determine whether road schedules and associated work order lines, will be based on road groups or road sections.

In Work Orders (Cyclic), if this option is set to 'Y' then each road work order line will be based on a road group. If set to N then lines will be based on a road section.

In Cyclic Maintenance Schedules, if this option is set to 'Y' then actual quantities may be entered for the schedule items. If set to N they may not be entered.

In Cyclic Maintenance Schedules by Section, if this option is set to 'N' then actual item quantities for road sections are automatically accumulated into schedule totals. If set to 'Y' there is no accumulation.

This option must not be amended on a live system.

Due to the varying nature of cyclic maintenance work a number of different road group types may be required for different routes etc., for example the grass cutting route will differ from the gully emptying route and the winter maintenance gritting route will differ from both the above.

The group types that can be used in cyclic maintenance schedules are set up in Product Options – HIG9130, setting the CYCGRPTYPD (DoT roads) or CYCGRPTYPL (Local roads) options to be a list of the required group types in the form GRIT, GULY, GRAS etc. Schedules may only be set up against groups of these types.

These group types and associated groups are set up using the modules contained in the Network Manager volume.

The link between the job item and the inventory type is created using Cyclic Maintenance Inventory Rules – MAI3626 and must be done before any schedules can be created using the inventory on the road sections.

5.3.2 Cyclic Maintenance Schedules

On entering this window, the cursor sits in the Name field waiting for you to enter a new schedule. To view existing schedules, select [Enter Query] enter your selection criteria followed by [Execute Query].

Schedule Id ***(Default)***

A unique system generated schedule id will be displayed.

Name ***(Required)***

Enter a descriptive name for this schedule.

Last Qty Calculations ***(Display Only)***

Displays the date that the quantity of work required was calculated for this schedule. This calculation is initiated by pressing the [Calculate Quantities] button.

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Description ***(Optional)***

If required, enter further descriptive text concerning the schedule.

Work Category ***(Required)*** ***List***

Select a work category that is to be associated with this schedule.

Work categories are defined using Item Code Breakdowns – MAI194 (Maintenance Manager System Administration Manual).

Agency ***(Required, Default)*** ***List***

Select the agency responsible for this schedule.

SISS ***(Optional)*** ***List***

If required, select a Standard Item Sub Section code to restrict the schedule.

Frequency ***(Required)*** ***List***

Select a frequency code to indicate how often the work contained in this schedule will take place. The frequency codes are defined via Interval Codes – HIG1220 (Maintenance Manager System Administration Manual).

Schedule by Asset ***(Optional)*** ***List***

Enter 'Y' to generate a cyclic work order with a work order line per asset using Cyclic Works Orders – MAI3800A. The work order line created will also contain the asst reference.

With this field set to 'Y' the schedule will not be visible in Cyclic Maintenance by Road Section – MAI3862.

Road Group Type ***(Required)*** ***List***

Select a valid road group type from the List of Values. The road groups available will have been defined in a product option

Road Group Id ***(Required)*** ***List***

Use the Gazetteer to select the road group to which this schedule will apply. Only road groups of the type entered in the previous field will be available.

Road Group Desc ***(Display Only)***

Displays the full name of the selected road group.

Start Date ***(Optional)***

Enter the start date of the schedule.

End Date ***(Optional)***

Enter the end date of the schedule.

The next group of fields display information about the 5 most recent works orders relating to this schedule. This represents the last 5 times that the work contained on this schedule was performed. As such they will initially all be blank.

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Works Order No ***(Display Only)***

Displays the works order number of the order relating to this schedule.

Date Instructed ***(Display Only)***

Displays the date that the work was instructed to the contractor.

Date Complete ***(Display Only)***

Displays the date that the work was completed.

Two buttons have been defined on this window for use when creating a schedule, they are as follows:

[Schedule Items] Opens the schedule items window and allows the entry of the schedule items that are to be used in this cyclic maintenance schedule.

[Calculate Quantities] Once the schedule items have been entered in the next window, this button will calculate the actual quantities to be included in the schedule based on the values set up in Cyclic Maintenance Inventory Rules – MAI3626 and the inventory present in the road sections for the selected road group.

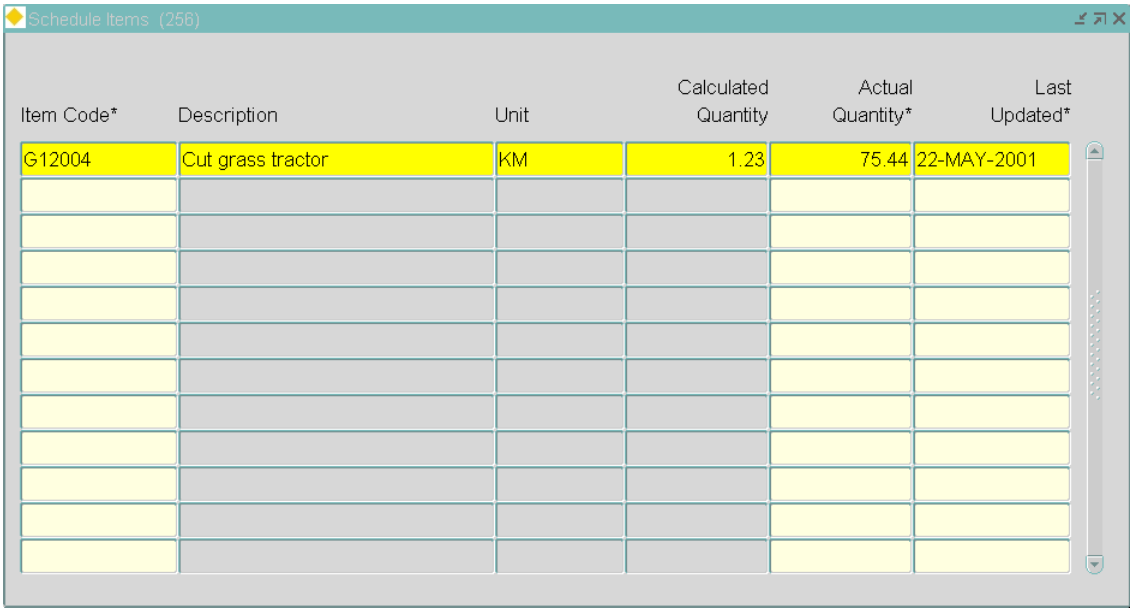

Figure 208 - Schedule Items

5.3.3 Schedule Items

This window allows you to define the actual items of work, which make up the schedule. The tasks themselves are represented by standard job items. These are created and maintained using Standard Items- MAI3888 Maintenance Manager System Administration Manual).).

On entry to the window, the cursor sits in the Item Code field, awaiting the selection of a job item. When viewing an existing schedule, this block will be populated with those items currently attached to the schedule.

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Item Code ***(Required)*** ***List***

Select a standard job item from the List of Values. This represents a job of work which will appear as such on the works orders generated for this schedule.

If an item is added and it has no associated inventory rules a warning message will be displayed. If you want the system to calculate the quantities automatically, delete the item that displayed the warning message, go back to Cyclic Maintenance Inventory Rules, add the required rule, then re enter.

Description ***(Display Only)***

The full description of the standard job item will be displayed.

Unit ***(Display Only)***

Displays the unit of measurement of this job item.

Calculated Quantity ***(Display Only)***

This field will display the amount of work to be done, as calculated by the system, each time this schedule is used. This calculation is a one-off 'batch' process (see below) and is initiated once the entire schedule has been defined. As such, it will initially be blank. The calculated quantity will be copied into the actual quantity field.

Actual Quantity ***(Optional/Display Only)***

This field will display the actual amount of work to be done each time a works order is generated for this schedule, if USECYCGRPL or USECYCGRPD is set to 'Y' the actual quantity can be updated, if set to 'N' it can not be updated here it must be updated at section level using Cyclic Maintenance Schedule By Section. Once it has been updated using Cyclic Maintenance Schedule By Section this field becomes display only because the actual quantities have been entered at section level.

Last Updated ***(Display Only)***

Displays the date that this line of the schedule was last recalculated or manually updated.

5.3.4 Calculating the Work Quantity

When the schedule items are first added to the schedule, the Calculated Quantity field will be blank. Once you have completed the definition of the schedule, press the [Calculate Quantities] button. This will cause the system to scan through the network and its associated inventory, looking for inventory items on the road sections relating to this schedule which will be affected by the jobs contained within the schedule. It is therefore possible for the system to calculate how much work running this schedule will create. This is then displayed in the Calculated Quantity field.

If the sections do not contain the required inventory items the calculated quantity field will be blank, it can be updated here if the product option USECYCGRPL or USECYCGRPD are set to 'Y'. If not the actual quantities are added to individual sections using Cyclic Maintenance Schedules By Section, the actual quantities will be populated with the calculated quantities remaining 0.

Note: This calculation may take some time. This will depend largely on the complexity of your road network as well as the amount of inventory held against it.

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5.3.5 Clearing Defects with Cyclic Maintenance Works Orders

A cyclic maintenance activity that is linked to a works order can clear defects if the regular inspection activity and associated defect found is linked to the cyclic activity.

For example,

An inspection activity of GA (Grassed Areas) could result in a defect of type IWED (Injurious Weed), this defect could in turn be cleared when the cyclic maintenance activity 69 (Grassed Areas: Treat Vegetation) is carried out on the section. These rules are set up and maintained using Valid for Maintenance Rules – MAI3440.

Each cyclic maintenance schedule is linked to a works category using this module. Works categories are linked to cyclic maintenance activities using Item Code Breakdowns – MAI1940.

5.3.6 The Next Step

If the calculated quantity is known to be accurate then each section will have the relevant number of assets associated with it, this can be viewed using Cyclic Maintenance Schedules by Section, these can be updates on a section by section level if required, the changes will be reflected in the Actual Quantity field.

If having created a schedule and calculated the quantity of work the count is inaccurate due to the lack of relevant inventory in the database, the next step is to use Cyclic Maintenance Schedules By Section – MAI3862 to apportion that work amongst the individual road sections that make up the schedule if the work orders are to be raised at section level and not at group level.

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5.4 Cyclic Maintenance Schedules by Section – MAI3862

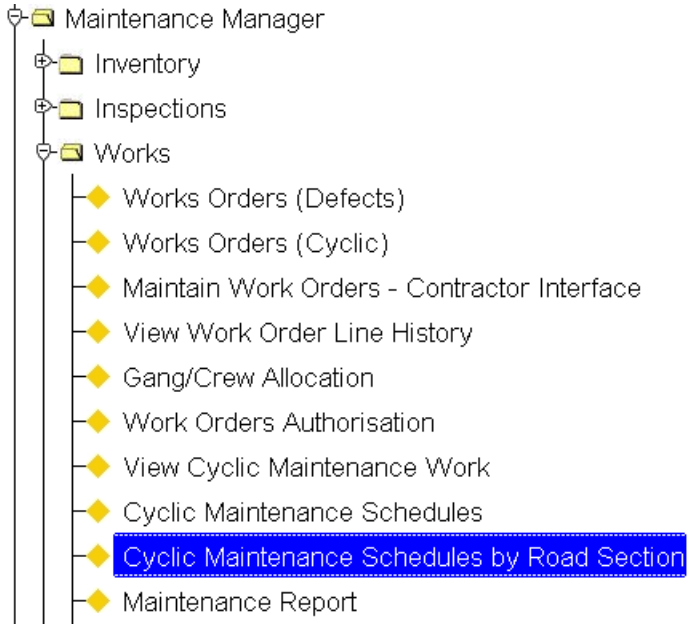

Figure 209 - Cyclic Maintenance Schedules by Section Menu Option

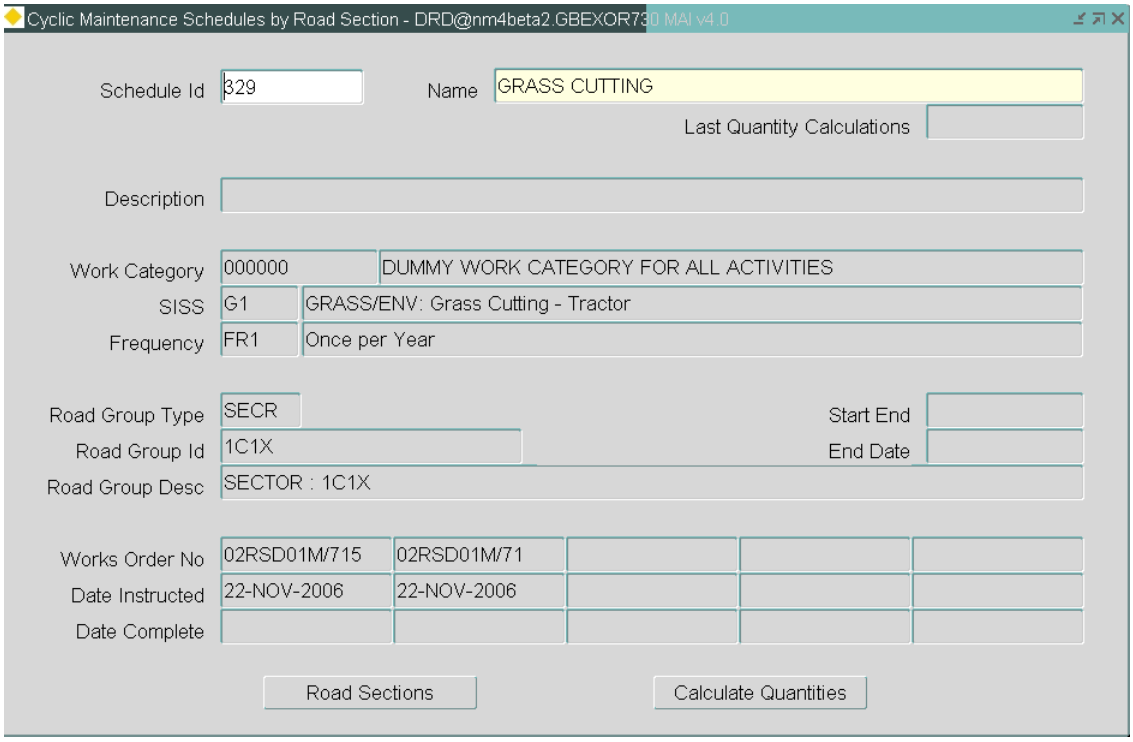

Figure 210 - Schedule by Section

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5.4.1 General Information

This option is used when the product option USECYCGRPD/USECYCGRPL is set to 'N' .

This form allows a schedule to be viewed, along with all of the road sections that make up that schedule. It is then possible to view the job items which, when the schedule is run, will be carried out on the inventory within each section.

Finally, although the system will calculate how much work is required in each section via Cyclic Maintenance Schedules, it is possible to amend the quantity on a section by section basis to retain complete control over how much work will be issued at any one time.

5.4.2 Schedules by Road Section

On entry to this window an existing schedule created using Cyclic Maintenance Schedules must be queried back before you can view and update the actual amounts on each road section. Select [Enter Query], enter your selection criteria followed by [Execute Query] from the toolbar.

Schedules with the "By Asset" flag set to 'Y' cannot be queried in this form.

All of the fields in this window are for information and are therefore display only.

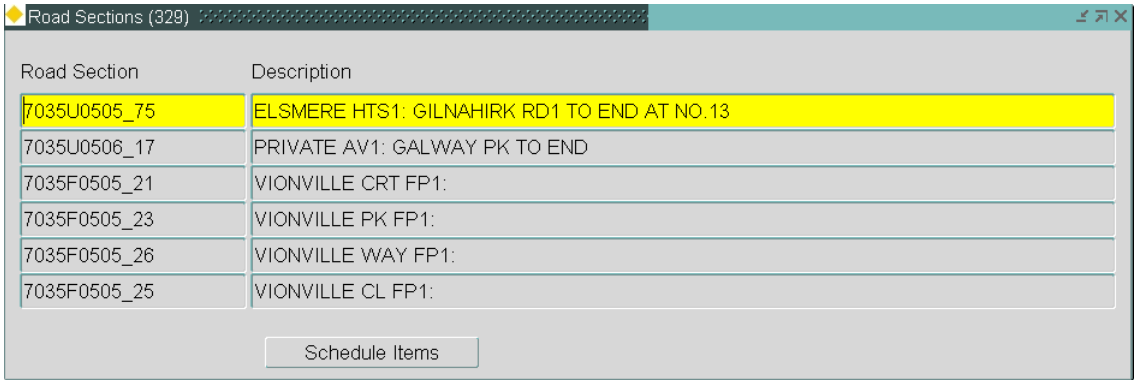

Figure 211 - Road Sections

5.4.3 Road Sections

This window displays a list of all the road sections that make up the road group to which this schedule applies. Highlight the required section and press the [Schedule Items] button see the schedule details that apply to the selected road section.

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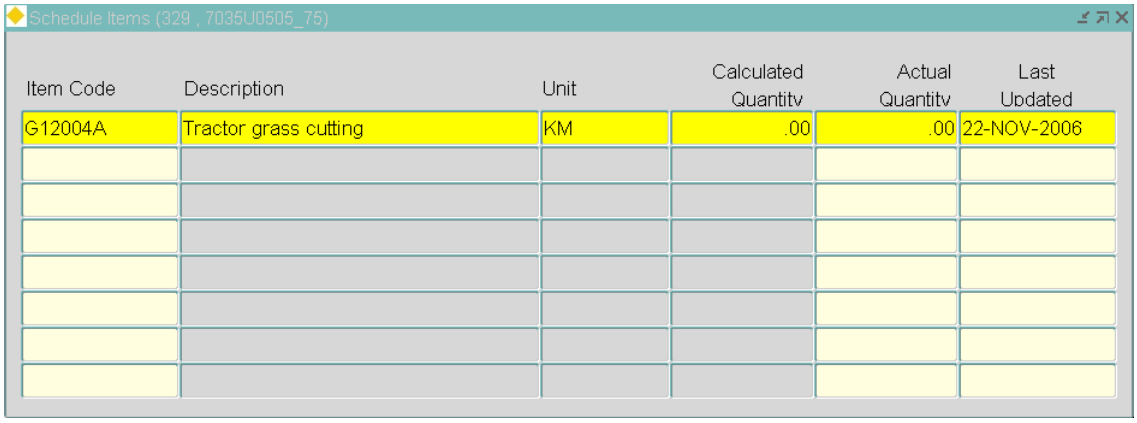

Figure 212 - Schedule Items

5.4.4 Schedule Items

Having created the schedule and made the system calculate its suggested quantity of work for each job item, you can use this window to override this figure with the actual amount of work to be done. The items of work themselves are represented by standard job items. These are created and maintained using Standard Items – MAI3888. (Maintenance Manager Administration Manual).

On entry to the window, the cursor sits in the first Actual Quantity field, awaiting the input of an actual quantity for the first job item on the schedule. Either enter the actual quantity of work to be carried out, or select [Duplicate Record] from the menu bar to accept the system calculated quantity.

Item Code ***(Display Only)***

Displays a standard job item representing a job of work to be carried out on this section. This item will appear on the works orders generated for this schedule.

Description ***(Display Only)***

Displays the full description of the standard job item.

Unit ***(Display Only)***

Displays the unit of measurement of this job item.

Calculated Quantity ***(Display Only)***

This field will display the amount of work to be done, as calculated by the system, each time this schedule is used. This calculation is a one-off 'batch' process and is initiated when the schedule is being created using Cyclic Maintenance Schedules – MAI3860.

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Actual Quantity ***(Optional)***

Enter the actual amount of work to be done in this section each time a works order is generated for this schedule. It is possible to accept the system-generated value from the Calculated Quantity field by [Duplicate Field] from the menu bar or by pressing [F3] to accept the system calculated quantity.

Last Updated ***(Display Only)***

Displays the date that this line of the schedule was last updated.

5.4.5 The Next Step

Having created the schedule and entered the actual amount of work to be done for each road section, the next step is to create a suitable contract to raise the works order against. This is done via Contracts – MAI3880. (Maintenance Manager Administration Manual)

Note: Before a contract can be created, the contractor relating to that contract must exist. Contractors are created via Contractors – MAI3881. (Maintenance Manager Administration Manual)

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5.5 View Cyclic Maintenance Work – MAI3804

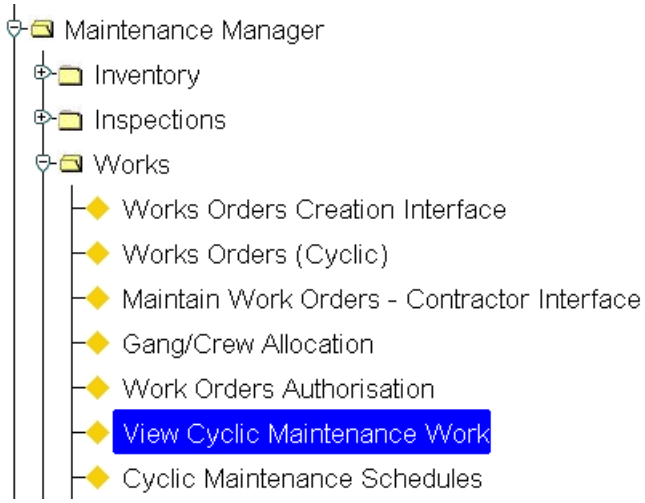

Figure 213 - View Cyclic Maintenance Work Menu Option

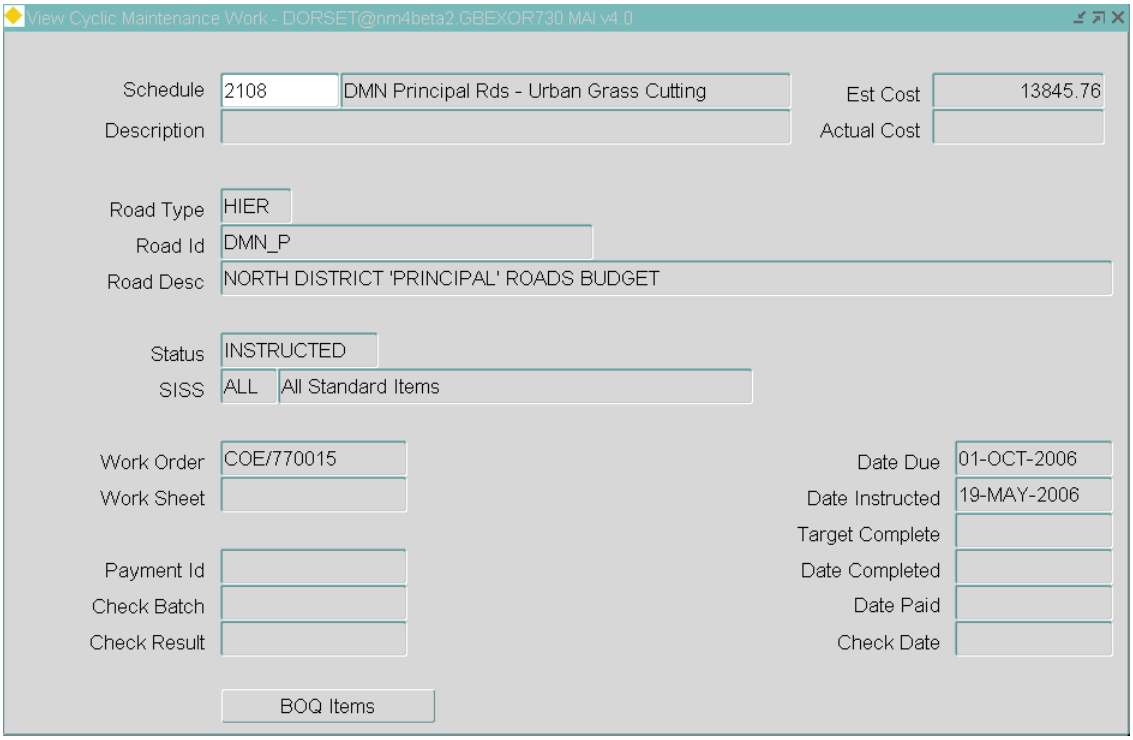

Figure 214 - View Cyclic Work

5.5.1 General Information

This form allows you to view the job items, quantities, costs etc. for a specified cyclic maintenance schedule.

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5.5.2 View Cyclic Maintenance Work

Upon entering this window the system will automatically query back a schedule, to retrieve the required schedule press [Enter Query], enter the required selection criteria followed by [Execute Query] to retrieve the required schedule.

All fields in this window are queryable and will be display only when the query has been executed.

Select the [BOQ Items] button to display the BOQ Items window.

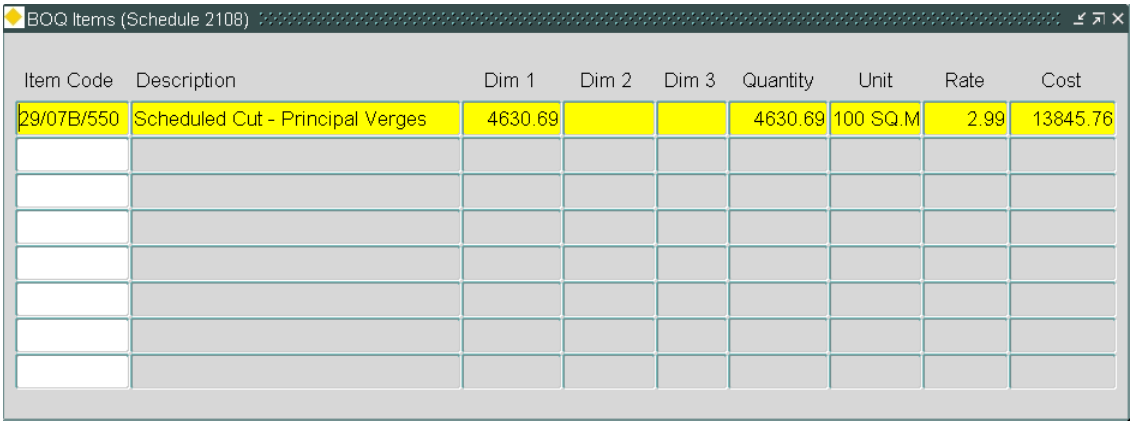

Figure 215 - BOQ Items

5.5.3 BOQ Items

This window contains details of the standard job items, which make up the current schedule including dimensions rates and costs.

All fields are display only and cannot be updated. To update the schedule, you should use Cyclic Maintenance Schedules – MAI3860.

To view additional information for a selected job item press the [Expand] button in the toolbar and the following window will be displayed:

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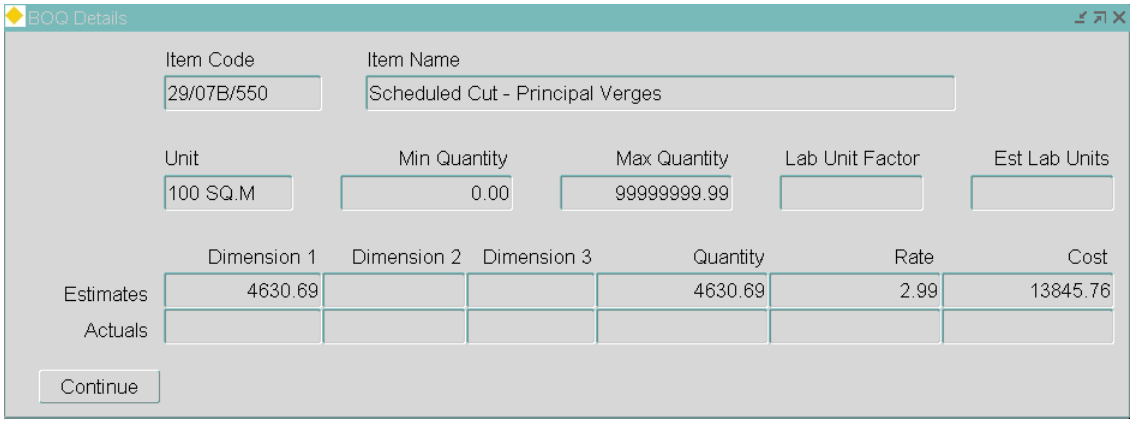

Figure 216 - BOQ Details

5.5.4 BOQ Details

This window is displayed by pressing the [Expand] button in the menu toolbar when a BOQ item is selected in the window above, it is for information therefore all fields are display only.

Select [Continue] to return to the BOQ Items window.

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5.6 Maintenance Reports – MAI3825

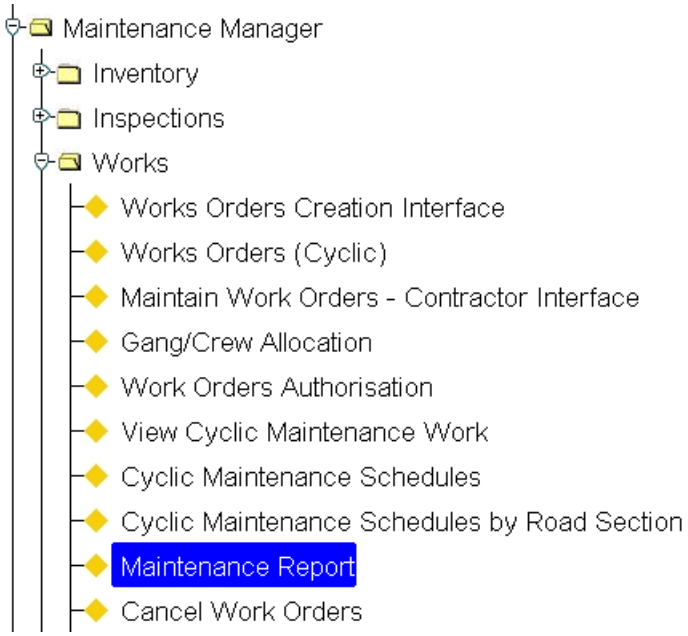

Figure 217 - Maintenance Reports Menu Option

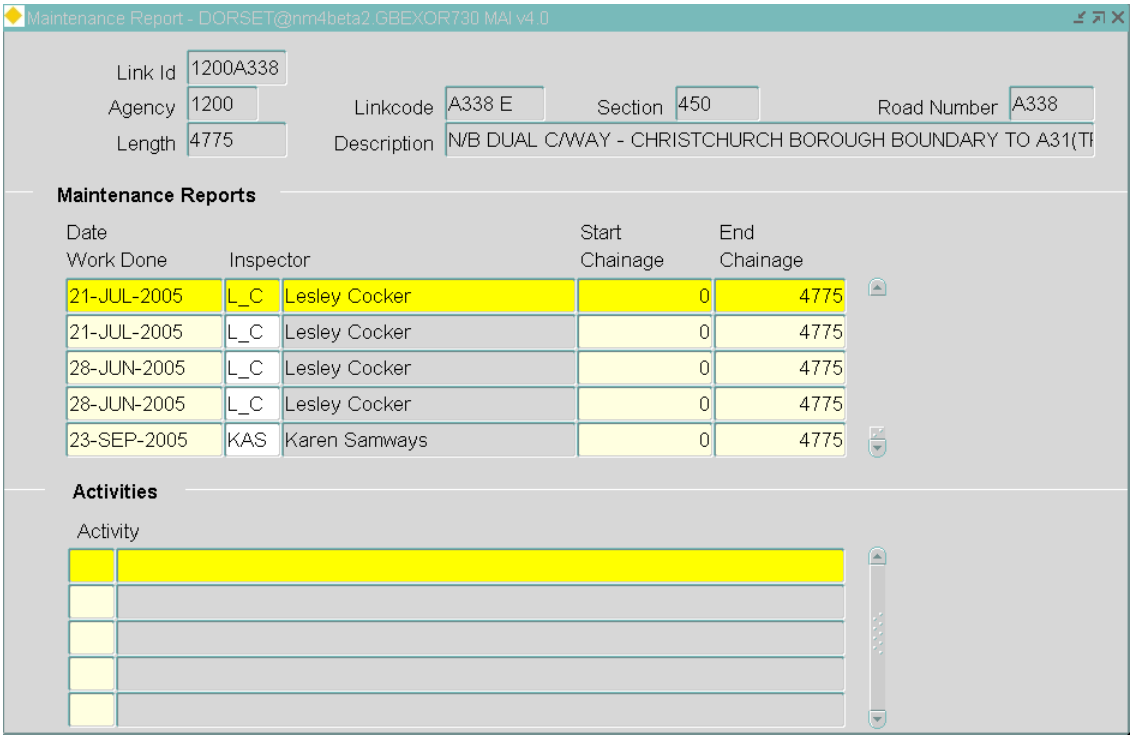

Figure 218 - Maintenance Report

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5.6.1 General Information

This form allows to insert, update, delete and review the maintenance work carried out on a section. Details of any cyclic maintenance work carried out on a section will automatically be displayed here.

Maintenance activities can be manually entered if required so your records are up to date without carrying out cyclic activities.

5.6.2 Section Details

When you enter this form it will be in query mode. Enter you selection criteria followed by [Execute Query] to retrieve the required road section. Enter details in one of the following fields:

- Link Id
- Agency
- Linkcode
- Section
- Road Number
- Length
- Description

5.6.3 Maintenance Reports

Details of the maintenance carried out on the selected section will be displayed.

Date Work Done ***(Required)***

Enter the date the maintenance activity took place.

Inspector's Initials ***(Optional)*** ***List***

Select the initials of the inspector(s).

St Chain ***(Required, Default)***

Enter the start number of the chain. This field defaults to zero.

End Chain ***(Required, Default)***

Enter the end number of the chain. This field defaults to the end of the section.

5.6.4 Activities

The activities carried out will be displayed.

Activity Area ***(Required)*** ***List***

Enter a valid activity are for the cyclic maintenance work that has been carried out.

Description ***(Display Only)***

The corresponding description for the activity area will be displayed.

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5.7 Valid for Maintenance Rules – MAI3440

Figure 219 - Valid for Maintenance Rules Menu Option

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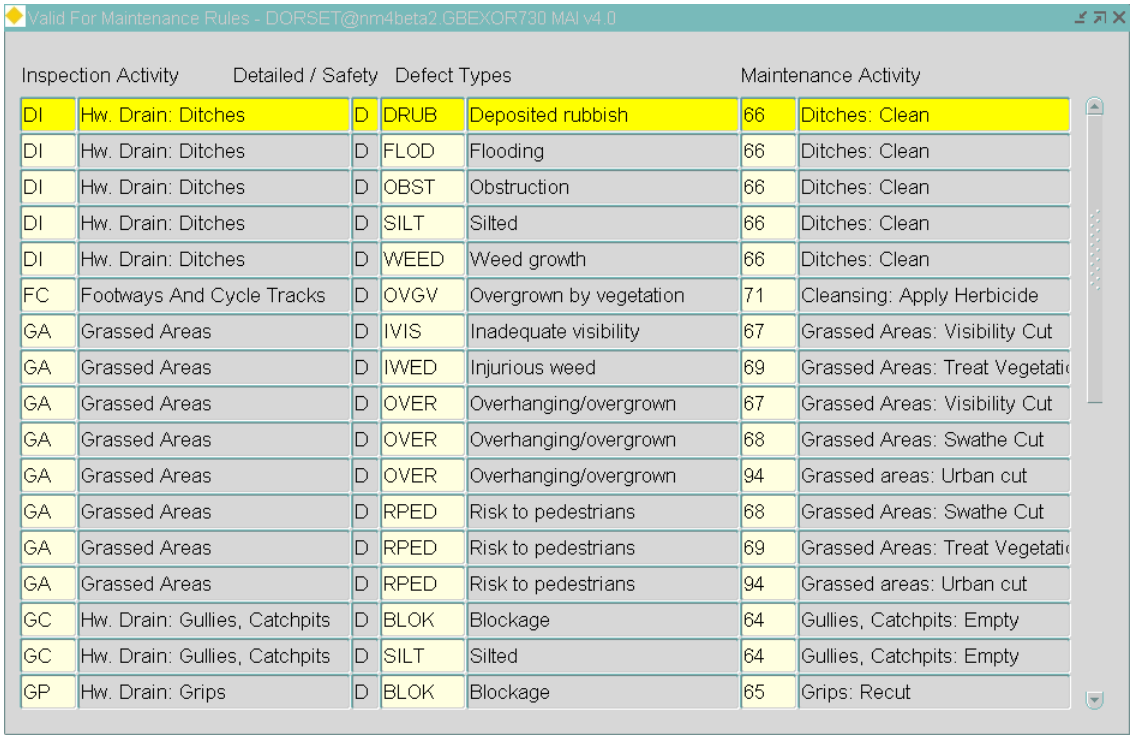

Inspection Activity	Detailed / Safety	Defect Types		Maintenance Activity	
DI	Hw. Drain: Ditches	D	DRUB	Deposited rubbish	66	Ditches: Clean
DI	Hw. Drain: Ditches	D	FLOD	Flooding	66	Ditches: Clean
DI	Hw. Drain: Ditches	D	OBST	Obstruction	66	Ditches: Clean
DI	Hw. Drain: Ditches	D	SILT	Silted	66	Ditches: Clean
DI	Hw. Drain: Ditches	D	WEED	Weed growth	66	Ditches: Clean
FC	Footways And Cycle Tracks	D	OVGV	Overgrown by vegetation	71	Cleansing: Apply Herbicide
GA	Grassed Areas	D	IVIS	Inadequate visibility	67	Grassed Areas: Visibility Cut
GA	Grassed Areas	D	IWED	Injurious weed	69	Grassed Areas: Treat Vegetati
GA	Grassed Areas	D	OVER	Overhanging/overgrown	67	Grassed Areas: Visibility Cut
GA	Grassed Areas	D	OVER	Overhanging/overgrown	68	Grassed Areas: Swathe Cut
GA	Grassed Areas	D	OVER	Overhanging/overgrown	94	Grassed areas: Urban cut
GA	Grassed Areas	D	RPED	Risk to pedestrians	68	Grassed Areas: Swathe Cut
GA	Grassed Areas	D	RPED	Risk to pedestrians	69	Grassed Areas: Treat Vegetati
GA	Grassed Areas	D	RPED	Risk to pedestrians	94	Grassed areas: Urban cut
GC	Hw. Drain: Gullies, Catchpits	D	BLOK	Blockage	64	Gullies, Catchpits: Empty
GC	Hw. Drain: Gullies, Catchpits	D	SILT	Silted	64	Gullies, Catchpits: Empty
GP	Hw. Drain: Grips	D	BLOK	Blockage	65	Grips: Recut

Figure 220 - Valid for Maintenance Rules

5.7.1 General Information

This form allows you set up the rules that define when a cyclic maintenance activity will clear a defect that was loaded as a result of a regular or ad hoc inspection.

For example, an inspection activity of GA (Grassed Areas) could result in a defect of type IWED (Injurious Weed), this in turn would be cleared when the cyclic maintenance activity 69 (Grassed Areas : Treat Vegetation) is carried out on the sections.

A standard set of rules are supplied with the system, these can be added to if required.

5.7.2 Valid for Maintenance Rules

Inspection Activity ***(Required)*** ***List***

Enter an inspection activity. These activities are set up using Activities – MAI1200.

A 'D' or 'S' will be displayed in the adjacent field indicating whether the activity is used in detailed or safety inspections.

Defect Types ***(Required)*** ***List***

Enter a defect type. These defects are set up using Defect Control Data – MAI1300.

Maintenance Activity ***(Required)*** ***List***

Enter a maintenance activity. These activities are set up using Activities – MAI1200.

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5.8 Related Maintenance Activities – MAI3628

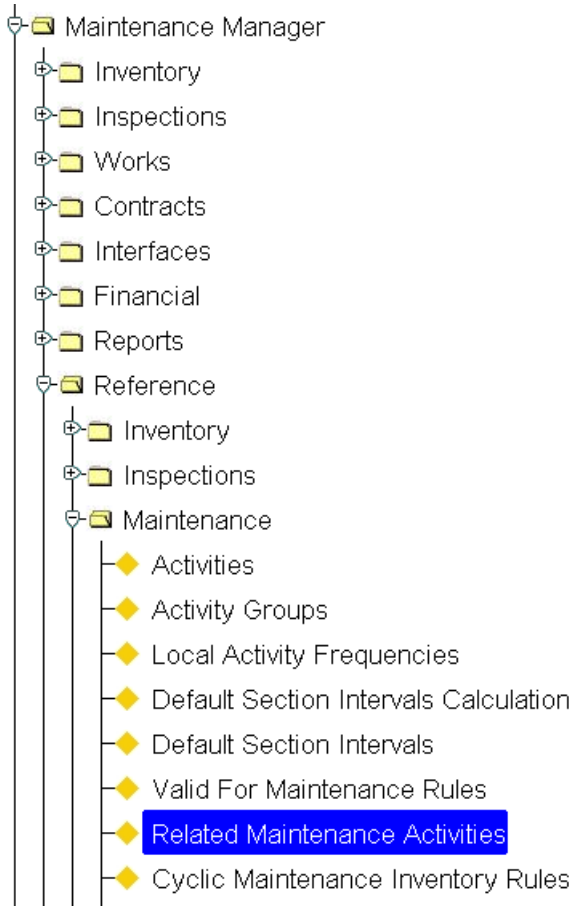

Figure 221 - Related Maintenance Activities Menu Option

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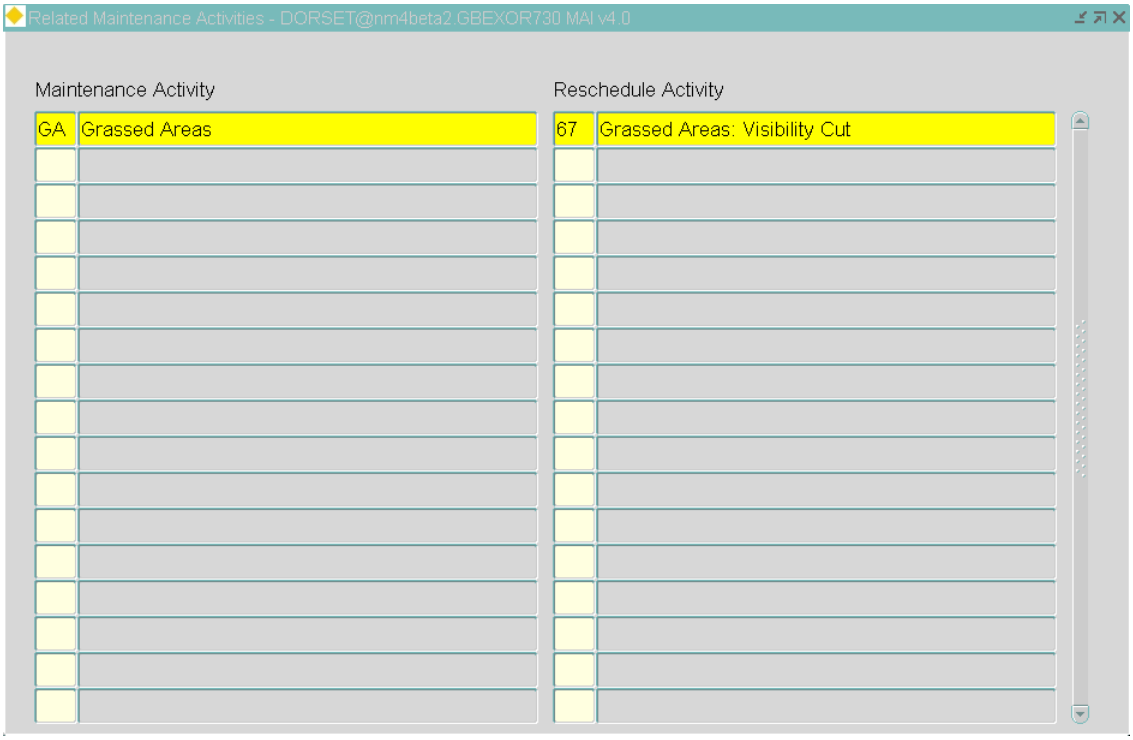

Figure 222 - Related Maintenance Activities

5.8.1 General Information

This form is used to reschedule cyclic maintenance activities when work has been carried out on a section that has an affect on that activity. For example, removing old signs along a carriageway and replacing them with new signs could result on the regular activity of sign cleansing being rescheduled.

These activities are set up and maintained using Activities – MAI1200.

Maintenance Activity ***(Required)*** ***List***

Enter a maintenance activity. This activity will have been previously linked to a works category using Item Code Breakdowns – MAI1940. Prior to being selected for use when raising a works order.

Reschedule Activity ***(Required)*** ***List***

Enter the activity that is to be rescheduled when the above activity is carried out on a section.

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6 Cyclic Maintenance Works Ordering Reports

This chapter provides examples and the required selection criteria for the Cyclic Maintenance Works Ordering and associated Reports.

The reports illustrated in this chapter are:

- BOQ Work Order (Cyclic) – MAI3907
- Cyclic Maintenance Done – MAI5032
- Cyclic Maintenance Activities – MAI3105
- Cyclic Maintenance Schedules – MAI3960

6.1 Running Reports

The majority of reports within highways by exor are accessed using a standard window called the Generic Reporting Interface (GRI). Whilst the selection criteria for each report will change from report to report, the way the reports are run, viewed and printed remains constant.

Below is an example of the Generic Reporting Interface.

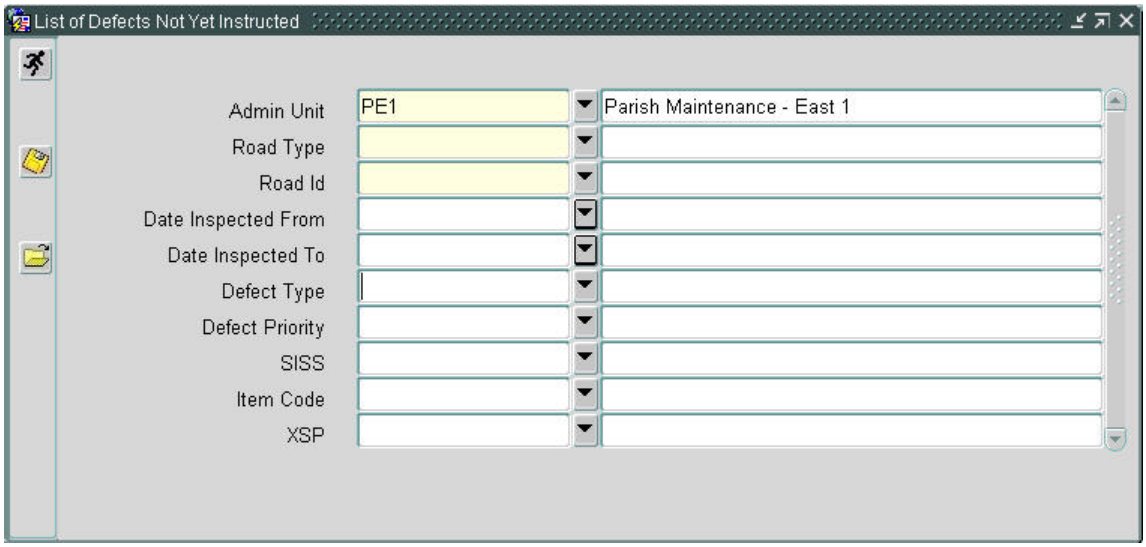

Figure 223 - GRI

The title of the report is displayed at the top of the window.

There are three buttons down the left hand side, they are as follows:

Run report. When the selection criteria has been entered, this will run the report and place the output in the report previewer.

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Save Parameters. The Parameters for reports that have to be constantly re-run or have complex selection criteria can be saved to a file and re-used. You will be prompted to enter a file name. Each user can have their own set of saved parameters.

Load Parameters. Previously saved parameters for the selected report can be loaded directly into the GRI. You will be prompted to enter a file name, if you have a number of saved parameters, double clicking the field will result in a list of saved parameters being displayed.

6.2 BOQ Work Order (Cyclic) – MAI3907

Purpose:

This report produces a detailed Cyclic Maintenance Work Order, which includes any Bill of Quantity items specified, for Work Order Lines on the Selected Works Order. You may choose to print Labour Units and/or target repair dates for each Work Order Line using the appropriate Selection Parameters. You may also choose to print only the Work Order, only a Control Sheet for the Work Order or both.

6.2.1 Selection Parameters

Work Order No ***(Required)*** ***List***

Enter the Works Order Number to be reported on.

Work Sheet No ***(Optional)***

To reprint part of an already printed Work Order, enter the Work Sheet Number to be reprinted. This appears near the top of each Sheet.

Print Lab Units (Y/N) ***(Required, Default)*** ***List***

Enter 'Y' to include the number of Labour Units needed to complete a Bill of Quantity Item on a Works Order Line or 'N' to not include Labour Units. The default value is 'N'.

Wrks ord/Ctrl sht/Both ***(Required, Default)*** ***List***

Enter 'W' to print only the Work Order, 'C' to print only the Control Sheet for a Work Order or 'B' to print both.

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6.3 Cyclic Maintenance Done – MAI5032

Purpose:

This report provides a summary of all Cyclical Maintenance work carried out on the selected Road Section. The following information is displayed:

- Linkcode
- Section Number
- Report Number
- Date Work Done
- Starrt Chainage
- End Chainage
- Activity Area
- Activity Description

6.3.1 Selection Parameters

Admin Unit	***(Required, Default)***	***List***

Select an administrational unit to be used for this report. The default is the Admin Unit assigned to the current User.

Road Id	***(Required)***	***List, Gaz***

If required, enter the Road Group Id from which to select defects from. If this field is left blank all Road Group Types will be reported on.

Start Chainage	***(Optional)***

Enter the chainage from which to start reporting from. Only cyclic maintenance work carried out after this chainage position will be included in the report.

End Chainage	***(Optional)***

Enter the chainage from which to stop reporting from. Only cyclic maintenance work carried out before this chainage position will be included in the report.

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6.4 Cyclic Maintenance Schedules – MAI3960

Purpose:
This report displays the selected Cyclic Maintenance Schedule.

6.4.1 Selection Parameters

Admin Unit	*(Required, Default)*	*List*

Select an administrational unit to be used for this report. The default is the Admin Unit assigned to the current User.

Road Id	*(Optional)*	*List, Gaz*

If required, enter the Road Id from which to select Cyclic Maintenance from. If this field is left blank all Road Group Types will be reported on.

Schedule Id	*(Optional)*	*List*

Enter the Cyclic Maintenance Schedule Id to be reported on

6.4.2 Cyclic Maintenance Schedules – MAI3960

LIVE2108 MAI3960 LIVE2108 NORTH PENNINE LINK GROUP Print Cyclic Maintenance Schedules Date: 29 DEC 1999 Page: 1

Schedule Id 1 sched1
Description sched1
Last Qty Calculations
SISS ALL ALL STANDARD ITEMS
Frequency 701 Frequency 1 Per Year
Works Order No 2/273
Date Instructed
Date Complete

Road Group 2900A69

Road Id 2900A69 1/10 GREENHEAD DUALING EASTBOUND FROM B630

Item Code	Description	Units	Calc. Quantity	Actual Quantity	Last Updated	Est Cost
1	UNDERTAKE REPAIR	ITEM	5.00	5.00	31-JUL-1998	10.00

Road Id 2900A69 1/04 CTY BNDRY TEMON BRIDGE TO C394 REAYGARTH

Item Code	Description	Units	Calc. Quantity	Actual Quantity	Last Updated	Est Cost
1	UNDERTAKE REPAIR	ITEM	8.00	8.00	31-JUL-1998	16.00

Figure 224

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7 Payments

This chapter describes the forms used to create, maintain and review Payments following the completion of works orders or individual works order lines. They are the following forms:

- Deselect Items For Payment – MAI3842
- Payment Run – MAI3840
- Query Payment Run Details – MAI3940
- List of Items for Payment – MAI3942

The form descriptions provide you with detailed information about each Payment related form, including:

- an overall description of the form
- a detailed explanation of each field, including available features (such as List of Values), default values and other characteristics
- helpful information for using the form

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7.1 Deselect Items for Payment – MAI3842

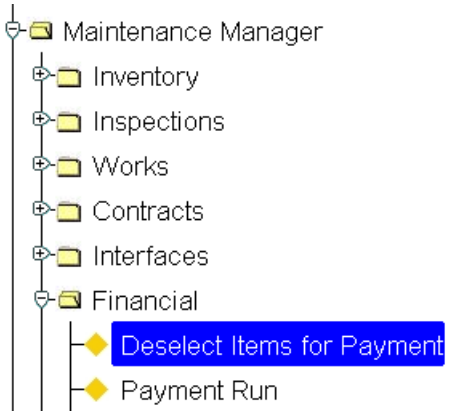
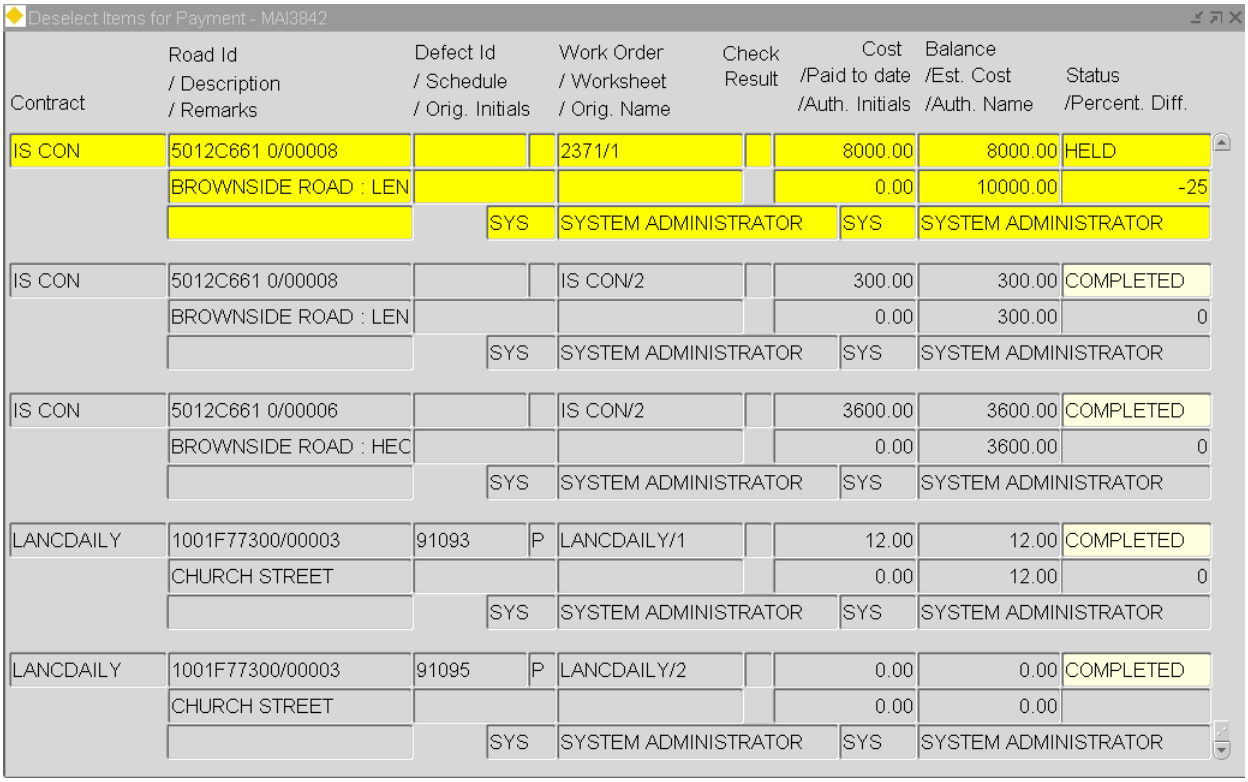


Figure 225 - Deselct Items for Payment Menu Option



Contract	Road Id / Description / Remarks	Defect Id / Schedule / Orig. Initials	Work Order / Worksheet / Orig. Name	Check Result	Cost /Paid to date /Auth. Initials	Balance /Est. Cost /Auth. Name	Status /Percent. Diff.
IS CON	5012C661 0/00008		2371/1		8000.00	8000.00	HELD
	BROWNSIDE ROAD : LEN				0.00	10000.00	-25
		SYS	SYSTEM ADMINISTRATOR		SYS	SYSTEM ADMINISTRATOR	
IS CON	5012C661 0/00008		IS CON/2		300.00	300.00	COMPLETED
	BROWNSIDE ROAD : LEN				0.00	300.00	0
		SYS	SYSTEM ADMINISTRATOR		SYS	SYSTEM ADMINISTRATOR	
IS CON	5012C661 0/00006		IS CON/2		3600.00	3600.00	COMPLETED
	BROWNSIDE ROAD : HEC				0.00	3600.00	0
		SYS	SYSTEM ADMINISTRATOR		SYS	SYSTEM ADMINISTRATOR	
LANCDAILY	1001F77300/00003	91093 P	LANCDAILY/1		12.00	12.00	COMPLETED
	CHURCH STREET				0.00	12.00	0
		SYS	SYSTEM ADMINISTRATOR		SYS	SYSTEM ADMINISTRATOR	
LANCDAILY	1001F77300/00003	91095 P	LANCDAILY/2		0.00	0.00	COMPLETED
	CHURCH STREET				0.00	0.00	
		SYS	SYSTEM ADMINISTRATOR		SYS	SYSTEM ADMINISTRATOR	

Figure 226 - Deselect Items for Payment

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7.1.1 General Information

Once an entire Works Order, an individual Works Order line or in the case of an Interim payment, part of a Works Order line has been completed, they are ready to be processed through the payment run.

The purpose of this module is to allow you to determine which completed Works Orders or Works Order lines you would like to be included in the next payment run. Unless a works order is specifically deselected using this screen, it will be paid by the next payment run. Those items, which are deselected, will remain so until they are explicitly set to be ready for paying.

Items may be deselected if there is a large discrepancy between the Estimated and Actual costs. This allows you to deselect the item from payment until discussions have been made with the contractor.

If amendments need to be made to an already completed works order or works order line follow the procedure Changing a Completed Works Order earlier in this manual.

To view Works Order details press the [Expand] button on the menu toolbar.

7.1.2 Work Order Lines

When you enter this window it will be in query mode, enter your selection criteria followed by [Execute Query] to return the required works order line details. Completed Works Order Lines can be queried on Contract Id, Road Id, Defect Id, Schedule Id, Works Order Number or any combination of these fields.

Selecting the [Expand] button will take you to Maintain Work Orders – MAI3800 and display the full work order details

Contract ***(Display Only)*** ***List***

Displays the number of the contract. List is only available in query mode.

Road Id/Desc ***(Display Only)***

Displays the section ID and description of the road section to which this works order relates.

Remarks ***(Display Only)***

The remarks on the work order line will be displayed.

Defect Id ***(Display Only)***

Displays the unique ID of the defect which this works order was rectifying.

Schedule ***(Display Only)***

For cyclic maintenance works orders, this field displays the ID of the schedule under which this works order was created.

Orig. Initials ***(Display Only)***

The Originators initials from the work order will be displayed.

Work Order ***(Display Only)***

Displays the reference number of this works order.

Work Sheet ***(Display Only)***

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Displays the serial number of the worksheet.

Orig. Name ***(Display Only)***

The Originators name will be displayed.

Check Result ***(Display Only)***

If a quality inspection has been carried out against this work order, the result of the inspection will be displayed in this field.

Cost ***(Display Only)***

Displays the total cost of the works order or work order line.

Paid to date ***(Display Only)***

The amount that has been paid on this work order will be displayed.

Auth. Initials ***(Display Only)***

The Authorising officers initials from the work order will be displayed.

Balance ***(Display Only)***

The Balance on the work order or work order line will be displayed.

Estimated Cost ***(Display Only)***

Displays the estimated cost of the works order or work order line.

Auth. Name ***(Display Only)***

The Authorising officers name will be displayed.

Status ***(Required, Default)*** ***List***

To stop a works order from being paid in the next payment run, set this field to ‘HELD’. To release the payment, set the field back to ‘COMPLETED'. The payment will then be made by the next Payment Run (Refer to the section Payment Run – MAI3840) below. If the Works Order Line is part of an Interim Payment the Status code may be changed to either 'VALUATION' which would allow the actual quantities of the BOQ items to be amended or 'UNAPPROVED'. To release the payment, set the field back to ‘INTERIM'. The payment will then be made by the next Payment Run (Refer to the section Payment Run – MAI3840) below.

Percent Diff. ***(Display Only)***

The percentage difference between the cost and the estimated cost will be displayed.

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7.2 Payment Run – MAI3840

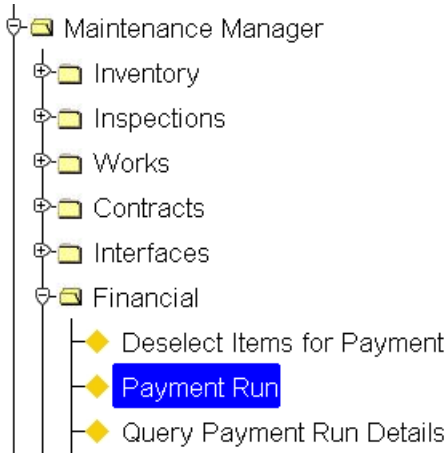

Figure 227 - Payment Run Menu Option

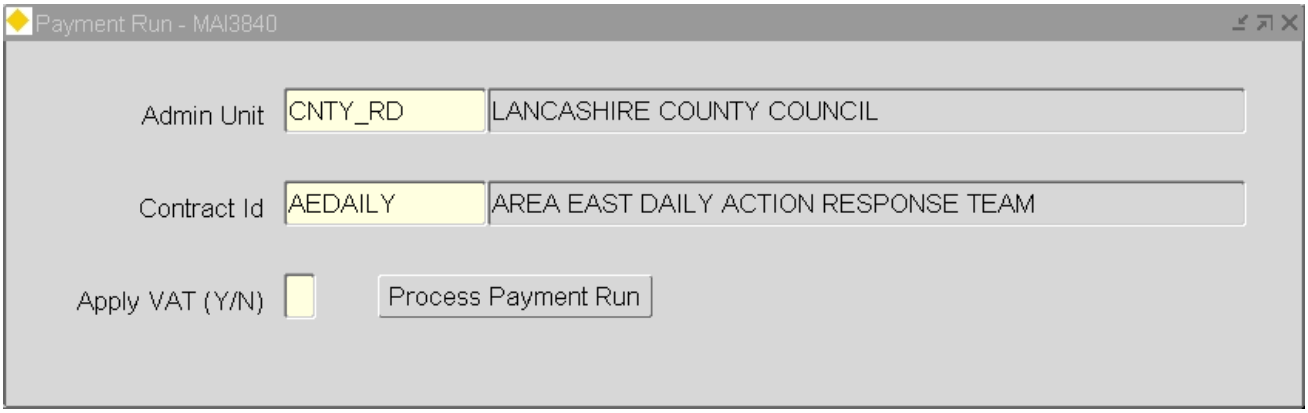

Figure 228 - Payment Run

7.2.1 General Information

This module is used to request a payment run. The payment run will pay all unpaid completed works orders and works order lines which meet the input criteria, except for those which have held from payment using Deselect Items For Payment – MAI3842

7.2.2 Payment Run

Admin Unit ***(Required)*** ***List***

Enter the admin unit which this payment run is being run against.

Contract Id ***(Optional)*** ***List***

If required, select a valid contract to restrict the payment run.

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Apply V.A.T (Y/N)	*(Optional)*	*List*

Enter 'Y' to apply VAT to all the job item costs.

Select the [Process Payment Run] button to carry out the payment run.

The following three reports will be produced:

7.2.3 Payment Run Report A

HIG2204
MAI3840A

Demo 2204
Payment Run Report A

Payment Run Id : 9 Payment Date : 28 NOV 2000
Page: 1 Docket No : 10

Admin Unit: Demo 2204

Contract Id: DSO1
Contractor : DEC

Internal DLO Contractor
Exor Contractor

W.Order Sheet	Defect Id /Schedule Id	Road Id / Description Location / Schedule Name		SISS	Charge Code /Quantity	Units	Comp Date Rate	This Payment
1/115:	103	0012A00012/01	opposite l/c 22		3ALL 00000A		28-MAR-2000	**2946.90**
		damaged asset		ALL 0L0001	29	HOURS	7.60	220.40
				0M0001	1	ITEM	13.30	13.30
				0O0001	12	ITEM	14.25	171.00
				0P0001	12	ITEM	211.85	2542.20
1/116:	105	0012A00012/01	opposite l/c 33		3ALL 00000A		28-MAR-2000	**8122.50**
		damaged		ALL 0L0001	44	HOURS	7.60	334.40
				0M0001	1	ITEM	13.30	13.30
				0O0001	55	ITEM	14.25	783.75
				0P0001	33	ITEM	211.85	6991.05
1/117:	107	0012A00012/01			3ALL 00000A		28-MAR-2000	**9688.10**
		damaged		ALL 0L0001	13	HOURS	7.60	98.80
				0M0001	1	ITEM	13.30	13.30
				0O0001	3	ITEM	14.25	42.75
				0P0001	45	ITEM	211.85	9533.25
1/121:	42	0016A00016/02			3ALL 00000A		30-MAR-2000	**300.00**
				ALL A22222	44	Hours	4.50	198.00
				P11111	12	m	8.50	102.00
1/121:	43	0016A00016/02			3ALL 00000A		30-MAR-2000	**2495.52**
				ALL 0L0001	33	HOURS	8.00	264.00
				A13331	2.3	SQ.M	3.40	7.82
				A19999	11.9	M	183.00	2177.70
				A20000	8	ITEM	5.75	46.00

Figure 229 – Payment Run Report A

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7.2.4 Payment Run Report B

BINTER — Blackburn with Darwen Borough Council — Date: 24 NOV 2000
MAI3840B — **Payment Run Report B** — Page:1

Admin Unit: Blackburn with Darwen Borough Council
Contract Id: 2000 — Extended updated contract for 2000
Contractor : DSO — Direct Services Department - Highways

	Docket Totals	Less Retention 0.00%	V.A.T. .00%	Payable
Running Total B/F				32187.51
This Payment	7380.94	0.00	0.00	7380.94
Total To Date				39568.45

Maximum Retention Reached

Dockets 1 to 9 — Value of Work this Payment 7380.94

Value of Work Contract To Date 39568.45

S.I.S.S Sub Totals	ALL	7380.94
Overall Total		7380.94

Figure 230 - Payment Run Report B

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7.2.5 Payment Run Report C

BINTER
MAI3840C

Council

Date: 24 NOV 2000
Page: 1

Payment Run Report C

Payment Authorisation

Creditor Type

Reference

Creditor's Name
Address

Direct Services Department - Highways
Davyfield Road
Blackburn

Cost Centre	Function Code	Cost Code	Job Number	Road Class	Total Value of Work	Retention	Amount due for Payment
	3ALL		00000	4	3318.54	0.00	3318.54
	3ALL		00000	5	957.48	0.00	957.48
	3ALL		00000	6	137.00	0.00	137.00
	3ALL		00000	7	1114.56	0.00	1114.56
	3ALL		00000	9	968.39	0.00	968.39
	3ALL		00000	A	254.31	0.00	254.31
	3ALL		00000	C	630.66	0.00	630.66
				Totals	7380.94	0.00	7380.94
				V.A.T.	0.00	0.00	0.00
						Total	7380.94

Figure 231 - Payment Run Report C

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7.3 Query Payment Run Details – MAI3940

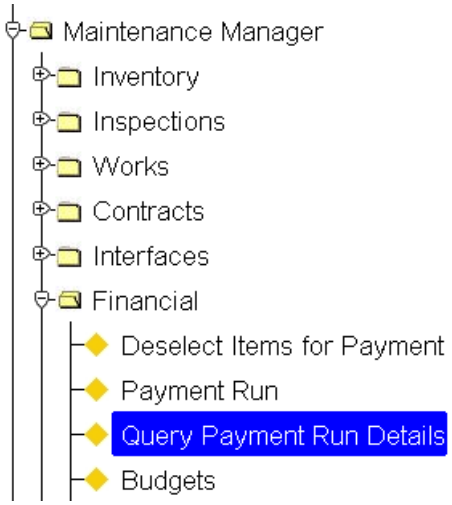

Figure 232 - Query Payment Run Details Menu Option

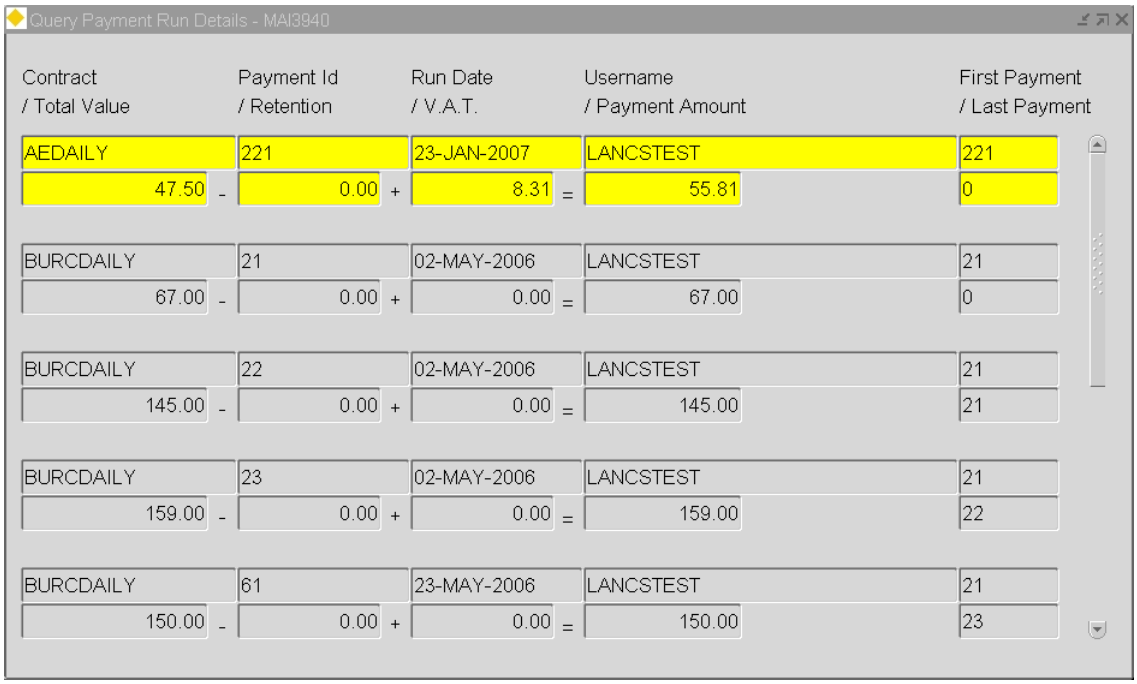
Query Payment Run Details - MAI3940
Contract / Total Value
Payment Id / Retention
Run Date / V.A.T.
Username / Payment Amount
First Payment / Last Payment
AEDAILY 221 23-JAN-2007 LANCSTEST 221
47.50 - 0.00 + 8.31 = 55.81 0
BURCDAILY 21 02-MAY-2006 LANCSTEST 21
67.00 - 0.00 + 0.00 = 67.00 0
BURCDAILY 22 02-MAY-2006 LANCSTEST 21
145.00 - 0.00 + 0.00 = 145.00 21
BURCDAILY 23 02-MAY-2006 LANCSTEST 21
159.00 - 0.00 + 0.00 = 159.00 22
BURCDAILY 61 23-MAY-2006 LANCSTEST 21
150.00 - 0.00 + 0.00 = 150.00 23

Figure 233 - Query Payment Run Details

7.3.1 General Information

This form allows you to view the details of past payment runs.

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7.3.2 Payment Run Details

This window displays details of all previous payment runs. To restrict the display to a selected run or runs, press [Enter Query], enter some criteria to determine the payment runs you want to see, followed by [Execute Query].

The window is arranged in the form of an arithmetic expression, allowing you to see how the payment amount was arrived at. The fields used in this expression are:

Total Value – Retentions + VAT = Total Payment Amount.

Contract ***(Display Only)***

Displays the unique ID of the contract for which this payment was run.

Payment Id ***(Display Only)***

Displays the unique, system generated ID of the payment run.

Run Date ***(Display Only)***

Displays the date upon which the payment run took place.

Username ***(Display only)***

Displays the name of the user who requested the payment run. Note that the payment run is requested through Payment Run – MAI3840.

First Payment/Last Payment ***(Display Only)***

Displays the range of payment numbers which were allocated during the payment run.

Total Value ***(Display Only)***

Displays the total value of the job items for the works orders included in this payment run. Note that some works order may have been deselected for payment using Deselect Items For Payment – MAI3842 and will not therefore be included in this total.

Retention ***(Display Only)***

If a retention has been specified, the calculated retention amount will be displayed here. Retentions are calculated as a percentage of total contract value, up to a maximum value. The retention percentage and the maximum value are defined when the contract is created via Contracts – MAI3880 (Maintenance Manger Administration Manual).

VAT ***(Display Only)***

If the payment run was set to calculate and include VAT, the total VAT amount will be displayed here.

Payment Amount ***(Display Only)***

The total amount actually paid will be displayed here.

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